NATIONAL FORUM

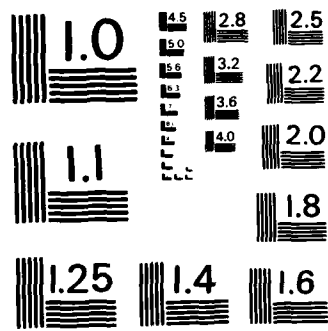MICROCOPY RESOLUTION TEST CHART

NATIONAL BUREAU OF STANDARDS-1963-

NATIONAL FORUM

on
Human Resource
Planning

for Private Sector and
Defense Leaders

859 25 021

AD9947

REPORT DOCUMENTATION PAGE

1a. REPORT SECURITY CLASSIFICATION	1b. RESTRICTIVE MARKINGS
UNCLASSIFIED	N/A
2a. SECURITY CLASSIFICATION AUTHORITY	3. DISTRIBUTION/AVAILABILITY OF REPORT
	Approved for public release
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE	**Distribution Unlimited**
N/A	UNLIMITED
4. PERFORMING ORGANIZATION REPORT NUMBER(S)	5. MONITORING ORGANIZATION REPORT NUMBER(S)
N/A	N/A

6a. NAME OF PERFORMING ORGANIZATION	6b. OFFICE SYMBOL (If applicable)	7a. NAME OF MONITORING ORGANIZATION
Syllogistics, Inc.	N/A	Analysis Division (AF/MPXA), Dir of Pers Plans, DCS Mnpwr & Pers, USAF
6c. ADDRESS (City, State and ZIP Code)		7b. ADDRESS (City, State and ZIP Code)
5413 Backlick Road (Unit E) Springfield, Virginia 22151		AF/MPXA Pentagon, Washington, D.C. 20330

8a. NAME OF FUNDING/SPONSORING ORGANIZATION Asst Secy of Def (Mnpwr, Instlns, & Log)	8b. OFFICE SYMBOL (If applicable) ASD (MI&L)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER F49642-84-D0038-0003

8c. ADDRESS (City, State and ZIP Code)	10 SOURCE OF FUNDING NOS.			
Pentagon Washington, D.C. 20301-4000	PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.	WORK UNIT NO.

11. TITLE (Include Security Classification)
PROCEEDINGS OF THE NATIONAL (reverse)

12. PERSONAL AUTHOR(S)
NONE

13a. TYPE OF REPORT	13b. TIME COVERED	14 DATE OF REPORT (Yr., Mo., Day)	15. PAGE COUNT
FINAL	FROM 09May85 TO 10May85	1985, August 22	380

16. SUPPLEMENTARY NOTATION

NATIONAL FORUM

17.	COSATI CODES		18 SUBJECT TERMS (Continue on reverse if necessary and identify by block number)
FIELD	GROUP	SUB GR	Human Resource Planning, Productivity, High Technology, Recruitment, Education and Training, Organization Cultures, Career Development, (see reverse)

19. ABSTRACT (Continue on reverse if necessary and identify by block number)

This is a report on the proceedings of the National Forum on Human Resource Planning for Private Sector and Defense Leaders, sponsored by the Assistant Secretary of Defense for Manpower, Installations and Logistics. The Forum's purpose was to bring together top-level representatives of private companies, the academic community, and Defense and associated agencies to exchange ideas and experience on manpower resource management issues and address the planning implications of these issues over the next 10 years. Issues and to interests were grouped into 10 major areas and a separate panel addressed each of the following areas: 1) Productivity Improvement; 2) High Technology - Meeting the Employment Need; 3) Education (Training and Retraining); 4) Changing Organizational Cultures; 5) Developing Careers; 6) Managing a Lean Workforce; 7) Personnel Innovations and Management; 8) Quality of Life - The Workforce and the Family; 9) Rethinking Awards and Incentives; 10) Retirement. (see reverse)

20. DISTRIBUTION/AVAILABILITY OF ABSTRACT	21 ABSTRACT SECURITY CLASSIFICATION
UNCLASSIFIED/UNLIMITED ☒ SAME AS RPT ☐ DTIC USERS ☐	UNCLASSIFIED

22a. NAME OF RESPONSIBLE INDIVIDUAL	22b TELEPHONE NUMBER (Include Area Code)	22c. OFFICE SYMBOL
DAVID T. FEE, Colonel, USAF	695-2911	AF/MPAC

DD FORM 1473, 83 APR EDITION OF 1 JAN 73 IS OBSOLETE.

Item 11: FORUM ON HUMAN RESOURCE PLANNING FOR PRIVATE SECTOR AND DEFENSE LEADERS

Item 18: Reducing Workforce, Personnel Innovations, Personnel Management, Work Simplification, Quality of Life, Dual Career Family, Rewards and Incentives, Compensation, Pay Retention, Performance-based pay, Benefits, Retirement.

Item 19: The primary objectives of each panel were to: 1) Determine high-payoff areas where continuing exchange between government and industry would be beneficial; 2) Identify mechanisms for future private sector-government sharing; and 3) Determine the best vehicles for a sustained and productive dialogue.

The private sector was represented by executives from major corporations such as Honeywell, IBM, Johnson and Johnson, Proctor and Gamble and TRW. The government was represented by senior civilian and military officials from the Office of the Secretary of Defense and each of the Armed Services.

Each Panel was chaired by a private sector executive and presented a report of its proceedings. This report presents the proceedings of each Panel, the Issue Papers presented to each Panel, a directory of participants and a summary of Panel sessions.

PROCEEDINGS OF THE

NATIONAL FORUM

on

Human Resource Planning

for Private Sector and Defense Leaders

May 9 and 10, 1985
Hunt Valley Marriott
Baltimore, Maryland

EXECUTIVE SUMMARY

The National Forum on Human Resource Planning for Private Sector and Defense Leaders convened in a suburb of Baltimore on 9 and 10 May 1985. This ground-breaking effort was undertaken on behalf of the Assistant Secretary of Defense for Manpower, Installations and Logistics (ASD [MI&L]), by the Deputy Assistant Secretary of Defense for Military Personnel and Force Management (DASD [MP&FM]), to bring together top-level representatives of private companies, the academic community, and Defense and associated agencies to:

- Begin a continuing dialogue and exchange of ideas and experience on manpower resource management challenges and their resolution.

- Address the planning implications of these problems and challenges in terms of their implications over the next 10 years.

As Executive Agent, the Air Force designated the Analysis Division of the Directorate of Personnel Plans (AF/MPXA), Office of the Deputy Chief of Staff for Manpower and Personnel (DCS/MP), to carry out the Executive Agent's tasks.

Government and private sector issues of mutual interest and concern were grouped into 10 major areas. A 10-Panel organizational construct was developed for execution of the Forum's work:

- PANEL 1 - PRODUCTIVITY IMPROVEMENT
- PANEL 2 - HIGH TECHNOLOGY - MEETING THE EMPLOYMENT NEEDS
- PANEL 3 - EDUCATION (TRAINING AND RETRAINING)

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This report should be assigned one AD number
per Lt. Col. J. Hoskins, USAF/MPAC

- PANEL 4 - CHANGING ORGANIZATIONAL CULTURES

- PANEL 5 - DEVELOPING CAREERS

- PANEL 6 - MANAGING A LEAN WORKFORCE

- PANEL 7 - PERSONNEL INNOVATION AND MANAGEMENT

- PANEL 8 - QUALITY OF LIFE - THE WORKFORCE AND THE FAMILY

- PANEL 9 - RETHINKING REWARDS AND INCENTIVES

- PANEL 10 - RETIREMENT

The prime objectives of each Panel were to:

- Determine primary high-payoff areas in which **a continuing exchange** between government and industry will serve the national interest.

- Identify mechanisms for future **private sector-government sharing.**

- Determine the best vehicles for **a sustained and productive dialogue.**

Private sector organizations participating in the two-day Forum proceedings were:

Advanced Technology Corp.	Honeywell, Inc.
AFL/CIO	HumRRO
Akman Associates, Inc.	IBM
American Family	Johnson & Johnson
Ashland Petroleum Co.	Kitchens of Sara Lee
AVCO Systems	Logistics Management Institute
Bank of America	McDonnell Douglas
Campbell Soups	Mellon Bank
Center for Naval Analyses	Merck & Co., Inc.
CitiBank	Olin Corporation
Compustar, Inc.	Pfizer Corporation
CONSAD	Procter and Gamble Co.
The Conference Board	Rand Corporation
Control Data Corporation	Reynolds Associates, Inc.
Corning Glass Works	Shawmut Corporation

Cummins Engine Co.	Sydney Reynolds
Dana Corporation	Texas Instruments, Inc.
Eaton Corporation	The Retired Officers Association
E-Systems	3M
General Electric Corp.	TRW
George Washington University	United Steelworkers of America
GTE Communications	University of Louisville
The Hay Group	Xerox

Participation on the government side was equally impressive. Office of the Secretary of Defense (OSD) and Armed Service human resource top leadership participation was comprehensive and balanced.

Forum proceedings began with a Keynote Address presented by The Honorable William Howard Taft, IV, the Deputy Secretary of Defense. Major addresses were presented in the following order during Forum luncheons/dinners, by:

- Mr. Harold K. (Hank) McCard
  President, AVCO Systems Division

- General Larry D. Welch, USAF
  Vice Chief of Staff
  United States Air Force

- Dr. George A. Keyworth, II
  Science Advisor to the President, and
  Director, Office of Science and Technology
  Executive Office of the President

The bulk of Forum and Panel time was devoted to a personal exchange between private sector and government leaders -- the essential first step in beginning a continuing dialogue between the government and the private sector.

Each Panel was chaired by a private sector executive. To assure reasonable coverage of the many important issues and to fully exploit the relatively brief time available, Forum participants were furnished with Issue Papers as a means

of stimulating thinking and suggesting potentially fruitful directions which a continuing dialogue might profitably take. Each Panel prepared a Report of its proceedings, the essence of which was briefed to the assembled participants immediately prior to Forum adjournment.

The following pages include the proceedings of each Panel, the Issue Papers originally presented to each Panel, a complete directory of participants, and a summary of Forum sessions during which all participants were convened as a corporate body.

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SECTION 1

NATIONAL FORUM ORGANIZATION, OBJECTIVES, AND PARTICIPANTS

On behalf of the Assistant Secretary of Defense for Manpower, Installations and Logistics (ASD [MI&L]), the Deputy Assistant Secretary of Defense for Military Personnel and Force Management (DASD [MP&FM]) undertook, in the late Spring of 1984, a ground-breaking effort to bring together top-level representatives of private companies, the academic community, and Defense and associated agencies to:

- Begin a continuing dialogue and exchange of ideas and experience on *manpower resource management challenges and their resolution.*

- Address the planning implications of these problems and challenges in *terms of their implications over the next 10 years.*

To oversee the extensive research and coordination tasks implicit in this undertaking, ASD (MI&L) appointed the Department of the Air Force as Executive Agent. Within the Department, the Analysis Division of the Directorate of Personnel Plans (AF/MPXA), Office of the Deputy Chief of Staff for Manpower and Personnel (DCS/MP) carried out the tasks of the Executive Agent.

In consonance with these Departmental arrangements, Colonel David T. Fee, USAF, Chief, AF/MPXA, was appointed as Forum Coordinator, concurrent with the ASD (MI&L) decision to designate this conference of private sector and Federal participants as:

THE NATIONAL FORUM ON HUMAN RESOURCE PLANNING

FOR

PRIVATE SECTOR AND DEFENSE LEADERS

Under Contract F49642-84-D0038-0003, the Executive Agent engaged Syllogistics, Inc., 5413 Backlick Road (Unit E), Springfield, Virginia, 22151, to provide administrative and support services in the organization and execution of ASD (MI&L) mandates regarding The National Forum.

NATIONAL FORUM OBJECTIVE

The following statement was approved by ASD (MI&L) through DASD (MP&FM) to succinctly present the fundamental purposes and objective of this first National Forum:

NATIONAL FORUM OBJECTIVE

Many management, manpower, training, and personnel problems are common to both government and industry. To this point, dialogue between the two communities on major issues has been limited. As we look to the next decade, it is clear that a sharing of the best thinking and experience of both sectors could be mutually productive in the national interest. The time is right for this exchange. Indeed, it is critical in an era of fiscal constraint, economic challenge, massive technological change, and evolving new individual and social value patterns.

NATIONAL FORUM ORGANIZATION

As the Forum sponsor, Dr. Lawrence J. Korb, the ASD (MI&L), served as Forum Chair during the two-day Forum proceedings, which convened:

- On 9 and 10 May 1985.

- In the northern suburbs of Baltimore at Marriott's Hunt Valley Inn, I-83 at Shawan Road, Hunt Valley, Maryland, 21031.

Participants in the Forum proceedings were provided with the following summary statement outlining the 10-Panel organizational construct for execution of the Forum's work, during the two-day period the participants were formally convened.

> Government and private sector issues of mutual interest and concern cover a broad array of management initiatives, pay and compensation issues, and questions on the handling of obsolescence, to name only a few. We have formulated the spectrum of common concerns into 10 major areas and have identified at least three key issues for each area. The prime objective of the National Forum of industry, government, and academic leaders is to explore these issues, determine those areas where a continuing exchange will be useful, identify the mechanism for sharing and the vehicle for future dialogue.

> It is an ambitious objective for a two-day Forum, but we believe the potential payoff is worth the investment. To achieve maximum Forum benefits, issue

papers will be provided to be in the hands of each
panel participant two weeks prior to the conference.
The papers will focus, but not limit, discussions on
those areas of perceived highest potential payoff.
Subject areas and key issues have been selected and
formulated to address the fundamental interests of
both the government and private sectors. The
assistance of The Conference Board in New York City
has been invaluable in identifying and formulating
areas and issues of greatest mutual interest to the
private, government, and academic sectors, the
resolution of which will most directly serve the
national interest.

Each of the 10 working panels constituting the Forum structure was composed
of participants from the private sector or academia and from Defense and
associated government sectors. Each Panel had a private sector Chair and a
government sector Assistant Chair.

The prime objectives of each Panel were to:

• Determine primary high-payoff areas in which a continuing exchange
  will serve the national interest.

• Identify mechanisms for future private sector-government sharing.

• Determine the best vehicles for a sustained and productive dialogue.

PARTICIPATION IN THE FIRST NATIONAL FORUM

Fifty-four senior executives from private sector commercial and academic institutions attended the two-day National Forum proceedings (10 chief executive officers, 26 vice presidents, the Assistant to the President of a national labor union, 15 directors or managers, and 2 academic deans). Each of them served on one of the Forum's 10 subject area Panels. Each Panel was chaired by a private sector executive. Private sector organizations participating in the two-day Forum proceedings were:

Advanced Technology Corp.	Honeywell, Inc.
AFL/CIO	HumRRO
Akman Associates, Inc.	IBM
American Family	Johnson & Johnson
Ashland Petroleum Co.	Kitchens of Sara Lee
AVCO Systems	Logistics Management Institute
Bank of America	McDonnell Douglas
Campbell Soups	Mellon Bank
Center for Naval Analyses	Merck & Co., Inc.
CitiBank	Olin Corporation
Compustar, Inc.	Pfizer Corporation
CONSAD	Procter and Gamble Co.
The Conference Board	Rand Corporation
Control Data Corporation	Reynolds Associates, Inc.
Corning Glass Works	Shawmut Corporation
Cummins Engine Co.	Sydney Reynolds
Dana Corporation	Texas Instruments, Inc.
Eaton Corporation	The Retired Officers Association
E-Systems	3M
General Electric Corp.	TRW
George Washington University	United Steelworkers of America
GTE Communications	University of Louisville
The Hay Group .	Xerox

Participation on the government side was equally impressive. Office of the Secretary of Defense (OSD) and Armed Service human resource top leadership participation was comprehensive and balanced. To illustrate:

- There were 14 participants from the Office of the Secretary of Defense, 11 each from the Army, Navy and Air Force, and five from the Marine Corps.

- The Director of Selective Service, and the key personnel policy official of the Office of Management and Budget (OMB) participated.

- The civilian/military mix included:

  •• Two Service Assistant Secretaries for Manpower, and the Principal Deputy for Manpower from the third Service Secretariat.

  •• Five civilian and one military Deputy Assistant Secretaries, plus nine Secretariat-level civilian Directors and a civilian Department Chair from the Naval War College.

  •• Six 3-stars, twelve 2-stars, eight 1-stars, and seven other senior military personnel.

Registration of Forum participants commenced on-site at 3:00 PM on the afternoon of 8 May 1985. A complete Forum agenda is presented in Section 2.

SECTION 2

NATIONAL FORUM PRESENTATIONS AND AGENDA

Four major presentations were made to the assembled Forum participants by internationally known government and private sector authorities. These addresses highlighted key National Forum issues, were made at the times indicated in the Forum Agenda reproduced below, and are presented verbatim in the immediately succeeding sub-sections of this Report.

FORUM AGENDA

Wednesday, 8 May 1985

Afternoon and Evening

- 3:00 - 9:00 Registration
- 7:30 - 9:00 Reception, Garden Room

Thursday, 9 May 1985

Morning	Afternoon and Evening
• 7:00 - 8:30 Registration Continues	• 12:00 Luncheon in Maryland Ballroom Address
• 8:30 Welcome in Maryland Ballroom	Mr. Harold K. (Hank) McCard President, AVCO Systems Division
Honorable Lawrence J. Korb Assistant Secretary of Defense (Manpower, Installations and Logistics)	• 1:30 Return to Panels
• 8:35 Keynote Address	• 5:30 Panels Recess
Honorable William Howard Taft, IV Deputy Secretary of Defense	Panel Chair/Assistant Chair Prepare/Submit Report for Typing
• 9:15 Instructions to Panels	• 6:30 Reception in Maryland Foyer
• 9:30 Break Into Panels	• 7:00 Banquet in Maryland Ballroom
	Entertainment by U.S. Army String Ensemble and U.S. Air Force Singing Sergeants
	• 8:30 Banquet Address
	General Larry D. Welch Vice Chief of Staff, US Air Force

Friday, 10 May 1985

Morning	Afternoon
• 8:30 Return to Panels	• 12:00 Luncheon in Maryland Ballroom Address
Review/Amend Panel Report	Dr. George A. Keyworth, II Science Advisor to the President
• 10:00 Assemble in Maryland Ballroom	
Begin Ten Panel Chair Reports	• 1:30 Complete Panel Reports (Panel Chairs) Wrap-Up (Secretary Korb)
	• 2:30 Adjournment

KEYNOTE ADDRESS BY THE HONORABLE WILLIAM HOWARD TAFT, IV, DEPUTY SECRETARY OF DEFENSE

The full text of the Secretary's remarks appear in the immediately following pages.

KEYNOTE ADDRESS BY THE HONORABLE WILLIAM HOWARD TAFT, IV

DEPUTY SECRETARY OF DEFENSE

TO THE

NATIONAL FORUM ON HUMAN RESOURCE PLANNING FOR PRIVATE

SECTOR AND DEFENSE LEADERS

9 MAY 1985

Thank you, Larry. I would like to add my own welcome to Dr. Korb's, and thank you for taking time from your busy schedules to be here. This is, indeed, a very distinguished gathering of industry, government, and academic leaders.

I am extremely enthusiastic about this Forum -- especially about the level of response to our first such effort in long range human resource planning. I am enthusiastic about the potential interchange of ideas between government and industry that can only benefit our most important common resource -- our men and women in uniform, our citizen soldiers, and our people in industry who form the backbone of our defense industrial base.

We meet at a time when many of our military manpower issues are being hotly debated in Congress. Unfortunately, a hot debate does not always mean a well informed, carefully reasoned debate.

The approach of too many Congressmen and their staffers reminds me of the old TV quiz show now making a comeback called "Jeopardy". For those of you that have not seen it for a while, "Jeopardy" contestants are asked to choose from among different subject categories -- say animals, broadway shows, or national defense. The emcee then reads off the <u>answer</u> to a question, and the contestant

has to guess what the question is. For example, the emcee might say, "The category is defense . . . the answer is blackjack". The contestant might then correctly reply, "What is the name of a new Soviet strategic bomber?".

I am often reminded of "Jeopardy" whenever I hear members of Congress say, "The answer is, we need no more than a three percent increase in defense spending" -- or two percent, or one percent, or a "freeze". If we establish this nation's defense policy by beginning with the answers -- like arbitrary percentages -- instead of first asking the tough questions about the Soviets' continuing massive arms build-up, then "Jeopardy" is perhaps the appropriate name for the game we are playing.

Wishful thinking about Moscow's intentions cannot diminish the hard facts of Soviet military power -- the relentless growth of their strategic nuclear systems, their production of tanks (over 3,000 new ones every year), armored vehicles, combat aircraft, and artillery at levels far above output by the U.S. and its allies combined. It cannot diminish the increasing capability of the Soviets to extend that military power to the far reaches of the globe. These are the facts that we must consider when we decide our military requirements -- for weapons, equipment, and personnel.

Realistically, we cannot hope to deter Soviet aggression and adventurism by out-spending, out-manning, or out-gunning them -- at least in terms of sheer numbers. To protect freedom, we rely on a strong collective defense, quality weapons, and especially on quality people.

The vastly improved education, training, and readiness of our military personnel is one of this Administration's biggest success stories. But it is a

story that could turn tragic if adequate compensation, incentives, and the quality of military life are _not_ maintained.

General George Patton cautioned that "Wars may be fought with weapons, but they are won by men". Quality personnel are a must if we are to realize the advantage of superior weapons in offsetting the Soviet numerical advantage. As one indicator, experience shows that those who do not have the discipline needed to finish high school often lack the discipline needed to adapt to military life. Last year, 93 percent of our recruits were high school graduates, up from 68 percent just four years earlier. Reenlistment rates are up, and our personnel are better trained. and at a higher readiness level than at any time in recent history. We at DoD are working hard, especially in the current deficit-driven budget environment, to maintain this quality edge. In the long run it will save us money, and lives.

We made the mistake once before -- in the late 70's -- of letting military compensation fall too far behind that of the civilian sector. As Congress debated, both enlisted personnel and officers left in droves, taking with them valuable experience -- and expensive training. For example, when we lose an F-15 fighter pilot with seven years of experience and 1300 flying hours, it takes seven years to replace him. We cannot hire another fighter pilot "off the street" or from a competitor, as might be done in industry. Flying hours are very expensive -- over $2,500 per hour in that F-15. Plus, those 1300 hours of experience are lost. The short-term savings realized by neglecting military compensation in the 70's have become very expensive for the taxpayer in the 80's. It is a mistake that we cannot afford to make again.

Of course, I do not mean to imply that the solutions to our defense manpower problems can be reduced simply to dollars and cents. The type of commitment and devotion required to accept 24-hour-a-day duty, sudden moves to far corners of the world, often without family, along with the risks inherent in combat -- this kind of devotion cannot be bought with money. And, if it could, we probably could not afford it, nor would we want such a mercenary force.

Fortunately, a strong belief in American ideals, and devotion to protecting those ideals, still exists in America today. But such selfless devotion cannot be taken for granted, especially in peacetime, if the basic needs of our members and their families are not met. Our nation must care for the needs of its military people in special ways consistent with the special demands we place on them. You can be certain that Secretary Weinberger and I will continue to speak out for these needs, and do everything possible to see that they are met.

Although the demands we place upon our military personnel are in many ways unique, we will face many common challenges with those of you in industry. Many of the major changes in human resource management will affect both defense and the private sector. Let me now turn to a few of these broader issues and challenges.

The first challenge involves change and competition. No one can doubt that our society is rapidly changing. The microchip and global, instantaneous communications are transforming our lives. Meanwhile, a tremendous debate continues over the types of industries and technologies, traditions and culture that will make up our "post-industrial" society.

There are several undercurrents to this wave of change, such as what has been referred to as the "abrupt collapse of the U.S. position in international trade". After a dismal decade of negative or non-existent growth, U.S. productivity has rebounded with modest increases in 1983 and 1984. But our trade gap widens, and our overall market share in many important industries decreases. The key to reversing these trends and regaining our competitive edge will be our ability to renew American quality and productivity.

We in DoD are intensifying our efforts with industry to help restore America's position in the international marketplace while we rebuild a strong defense. We are doing this through our several quality initiatives such as streamlining contract specifications, creating incentives for long-term capital investments, providing better training, and sharing productivity savings through employee gainsharing.

Some, however, have already dismissed the United States as an industrial leader. For example, in his best-selling book Megatrends, John Naisbitt concluded that it is "Too late to recapture American industrial supremacy", as we shift from an industrial to an information, or "service-dominated" society.

Although technology will force continual shifts in jobs and job skills, we must prevent the decline of America's industrial and manufacturing prowess. Millions of jobs, our standard of living, and our economic survival are at stake. Our national security is also at risk. A strong defense, along with our critical mobilization and surge capabilities, is dependent upon a strong industrial base.

To renew American productivity and quality, we will need vision, participation, performance, and integrity. This will require short-term sacrifices to achieve long-term objectives. But I am confident that we can, together, meet this challenge.

Our changing workforce will present another challenge. The traditional family -- where the husband works and the wife stays home with the children -- now accounts for only seven percent of the U.S. population, down from 43 percent in 1960. Today we see many single parents and dual-career families that place much greater family demands on workers. In addition, the aging of our overall workforce, coupled with the decline in the number of young people entering the workforce, offers new challenges to both industry and defense.

Likewise, our methods of compensating people are constantly evolving. Over the last two decades the importance of benefits has grown to rival wages, and benefit costs have rapidly climbed. We in DoD will remain under constant pressure from Congress to bring down future benefit costs, especially for retirement. But in working toward this end, we will not accept any breach of faith with the men and women who have served, and are serving so proudly in the defense of our nation. We -- as a nation -- simply cannot afford arbitrary cuts in military compensation that would destroy the significant progress we have made in recruiting, retention, and readiness.

The last challenge -- which I briefly mentioned in discussing productivity -- can also be classified under lifetime education needs. Perhaps the most important revolutions in the world today are the revolutions in technology and information. With rapid technological change decreasing the

-14-

"half life" of education and training, more people will need to update themselves continuously. And as the pace of change quickens, we can expect more skills to become obsolete and the need for career shifts and retraining to increase.

In all of these challenges, we must remember that the key ingredient is people. It is not enough to have state-of-the-art equipment. Advances in computer-based manufacturing, robotics, and other forms of automation do not change the central importance of trained, motivated workers. People will always be the key to industrial productivity, as they will remain the most important element of our nation's defense.

These are just a few of the common challenges that we as leaders in defense and industry face, and together, must meet. The immediate task before you is to lay the foundation for a continuing dialogue that in the long run will help us deal with these issues. That's a tall order for two short days. But the three basic steps that Dr. Korb has set up for you should prove helpful as you work together in your Panels.

First, brainstorm the wide array of issues before your Panel. Take advantage of the diversity and expertise we have gathered here.

Next, set priorities. Determine the high-payback areas.

But most importantly, chart a course for action. If we are successful in establishing permanent lines of communications between DoD and industry on these vital human resource issues, then the valuable time and effort expended here will have been well spent.

By working together we can build a stronger defense, a better way of life, and a safer future. Our nation is, as President Reagan has put it, "Poised for greatness". The words of Alexis DeTocqueville are as true today as when written 150 years ago:

> "America _is_ a land of wonders, in which everything is in constant motion and every change seems an improvement. (And where) no natural boundary seems to be set on the efforts of man; and in his eyes what is not yet done is only what he has not yet attempted to do."

Thank you for participating, and good luck on your important work ahead.

ADDRESS BY MR. HAROLD K. (HANK) McCARD, PRESIDENT, AVCO SYSTEMS DIVISION

Mr. McCard supported his remarks using a series of 18 slides which are reproduced in the following pages and which were shown to the audience in the order in which they appear here. The fundamental thrust of Mr. McCard's verbal presentation is summarized below.

AVCO Systems Division's top managers went to Japan for the purpose of observing Japanese management style, particularly in the quality and productivity arenas. 10 major Japanese firms were visited across a spectrum of industry categories. Each provided the AVCO top management team with in-depth presentations on their product concentrations, volume of production and sales, history of product dispersion and market penetration and, of course, management methods and techniques.

Total quality control (TQC) is seen by Japanese industry as a key management tool vital to achievement of organizational objectives in every area of product development, production, sales and service. In terms of both management and employee perspectives, the outcomes of pervasive TQC applications throughout the organization flow directly to the organizational and individual employee "bottom line". TQC outcomes in terms of increased market share, corporate profitability, and employee renumeration demonstrate that quality and productivity are the way to success.

Conscious and continuing application of TQC precepts, and the visible results achieved in attaining organizational goals and rewarding individual accomplishment, contribute directly to the establishment of productivity as an

attitude of mind throughout the organization. And productivity as an attitude of mind means an unrelenting belief in: the ability to improve through innovation no matter how good the present looks; the ability to adapt to changing economic and social conditions; and an equivalent level of faith in human progress.

Employee and organizational needs are inextricably linked. Employees are vital assets, and employee participation and communications are vitally important in the TQC process. Neither organizational demands nor individual demands can be met at the other's expense. Both require a continuing joint effort to meet the demand for new organizational solutions to the attainment of productivity goals and the enhancement of the quality of work life.

Perspectives of Quality and Productivity in Japan

PRESENTED TO

**NATIONAL FORUM ON
HUMAN RESOURCE
PLANNING**

9 MAY 1985

**H. K. McCard
President**

WE WENT TO JAPAN TO

OBSERVE THE JAPANESE MANAGEMENT STYLE—
SPECIFICALLY AS IT RELATES TO QUALITY AND
PRODUCTIVITY

AND WE WERE INDEED IMPRESSED.

OUR GROUP, AVCO'S SECOND EXECUTIVE STUDY GROUP,
INCLUDED THE

CHAIRMAN OF THE BOARD
CORPORATE VICE PRESIDENT, QUALITY
PRESIDENT, THE PAUL REVERE LIFE INSURANCE COMPANY
PRESIDENT, AVCO FINANCIAL SERVICES
PRESIDENT, AVCO LYCOMING STRATFORD DIVISION
PRESIDENT, AVCO LYCOMING WILLIAMSPORT DIVISION
PRESIDENT, AVCO SYSTEMS DIVISION
PRESIDENT, AVCO ELECTRONICS DIVISION
PRESIDENT, AVCO SPECIALTY MATERIALS DIVISION
PRESIDENT, AVCO EVERETT RESEARCH LABORATORY
PRESIDENT, AVCO INTERNATIONAL SERVICES

THESE ARE THE JAPANESE FIRMS WE VISITED

YOKOGAWA HEWLETT/PACKARD
KOMATSU
TOKYO JUKI
TOCHIBA
NITSUKO, LTD.
KAWASACKI HEAVY INDUSTRIES
MAZAK CORP.
EBARA CORP.
FUJI BANK
IHI'S TOKYO SHIPYARD

YOKOGAWA/HEWLETT PACKARD
YHP

HISTORY OF YHP

Business Theme	Decade 60's	Decade 70's	Decade 80's
	We measure ELECTRONICS	Measurement Automation with Computers	Total Information System for Manufacturers
	High Frequency Instruments	HP-IB	MPN

Pie chart of sales FY 81

- YHP Developed Products (YHP Proprietary)
- Transferred Products 27%
- Imported products from HP 59%

Largely dependent on HP!

- From instruments to systems!
- From lab to factory!

Japanese market demands for product quality are more severe than America's

Establish our initiative!

Sales

x100M Yen

Medical Instruments
Analytical Instruments
Components
Electronic Measurement Instruments
Computers
Personal Computers

Products

YHP established 1963

Trend of order amount

Declaration of TQC

1965 1970 1975 1980 year

45 0147

GENERAL STEPS TO TQC IMPLEMENTATION

1. VISIBLE COMMITMENT BY TOP MANAGEMENT
   - DRAMATIZE THE IMPORTANCE OF QUALITY
   - CONVINCE PEOPLE THE NECESSITY OF INNOVATIVE WAY

2. TQC TRAINING/SQC TRAINING

3. ESTABLISH AGREED UPON MEASURES OF QUALITY
   - DEFINE PROCESSES
   - INSTALL PROCESS PERFORMANCE MEASURES (PPM)

4. SET GOALS AND ANNUAL OBJECTIVES
   - EXPECTATIONS MUST BE GREAT ENOUGH TO CHANGE THE PRESENT WAY
   - OBJECTIVES EVOLVING AS THEY PENETRATE THROUGH ORGANIZATION

5. TAKE DATA FOR THE PROCESS IMPROVEMENTS

6. GENERATE SUCCESS PROJECTS THAT INSTITUTIONALIZE PROCESS IMPROVEMENTS
   - SHOWCASE PROJECTS
   - SHARE THE BEST PRACTICES

7. TOP MANAGEMENT ATTITUDES AND AUDITS
   - ABSOLUTE SUPPORT, CONCERN, AND REWARD
   - ANNUAL QUALITY AUDIT

KOMATSU

TOTAL QUALITY CONTROL AS MANAGEMENT TOOL IN KOMATSU

DEFINITION OF TQC AT KOMATSU

SATISFYING KOMATSU'S WORLDWIDE CUSTOMERS THROUGH RATIONAL COST-CONSCIOUS RESEARCH, DEVELOPMENT, PRODUCTION, SALES AND SERVICING.

(1) TQC IS A MANAGEMENT TOOL WITH WHICH TO REALIZE AND ACHIEVE POLICIES AND TARGETS OF THE COMPANY MOST EFFECTIVELY.

(2) AS MANAGEMENT TOOL, TQC IS BLENDED WITH OTHER TECHNIQUES AND SPECIALIZED KNOWLEDGES.

Ⓐ PROJECT AND INTRODUCTION OF TQC BY KOMATSU

In August, 1961, it became apparent that, the largest bulldozer manufacturer in the world was planning to establish a joint venture with a giant firm in Japanese industry.

For survival of KOMATSU, it was absolutely necessary to establish, in shortest possible time, a system which would enable KOMATSU to produce bulldozers competitive in all aspects including performance, reliability and cost, with the products of their joint venture.

For accomplishing this, KOMATSU schemed a project called "Ⓐ (circle A) campaign" and set up its headquarters in August, 1961 to concentrate the entire energy of the firm for its execution.

KOMATSU top management believed that for the complete accomplishment of Ⓐ project, it was indispensable to apply quality control techniques throughout the company. KOMATSU finally decided to introduce TQC in October, 1961.

QUALITY CONTROL HAS A BROAD DEFINITION AT KOMATSU

QC IS DEFINED TO BE:

SATISFYING WORLDWIDE CUSTOMERS THROUGH RATIONAL COST-CONSCIOUS RESEARCH AND DEVELOPMENT, PRODUCTION, SALES, AND SERVICE

QUALITY ASSURANCE EMPHASIZES RELIABILITY

EXAMPLES OF QUALITY

BRAND RECOGNITION	QUALITY OF COMPANY
LEAFLET/SALES TALK	QUALITY OF SALES
PRODUCT FEATURES	QUALITY OF PRODUCT
PRICE/TERMS/SERVICE COSTS	COST QUALITY
DELIVERY/INSTALLATION	QUALITY OF DELIVERY

EFFECTS OF TOTAL QUALITY CONTROL

BY IMPLEMENTING TQC ON COMPANY-WIDE SCALE, WE CAN REALIZE
THE FOLLOWING EFFECTS.

(1) EFFICIENT ACHIEVEMENT OF COMPANY POLICY AND TARGETS
(DEPLOYMENT OF PDCA SYSTEM).

(2) IMPROVEMENT OF HUMAN RELATIONS AND MORALE
(PARTICIPATION OF ALL MEMBERS OF COMPANY AND QC CIRCLE
ACTIVITIES).

(3) DEVELOPMENT OF HUMAN ABILITY (ACQUIRING TQC
SENSE = COMMON SENSE).

(4) IMPROVEMENT OF ORGANIZATIONAL CLIMATE OF COMPANY
(IMPROVING PROFIT & LOSS BREAK-EVEN POINT) UTILIZING TQC AS
FUNDAMENTAL MANAGEMENT TOOL.

(5) ESTABLISHMENT OF BETTER COMMUNICATION AND COOPERATION
AMONG WORLDWIDE KOMATSU PEOPLE.

SO WHERE'S THE BEEF?

IN MANAGEMENT BELIEFS:

- TQC IS THE WAY TO SUCCESS

- QUALITY IS A KEY FACTOR IN GAINING MARKET SHARE

- QUALITY AND PRODUCTIVITY GAINS FLOW DIRECTLY TO THE BOTTOM LINE

- PRODUCTIVITY OF CAPITAL ASSETS IS IMPORTANT — BUT SECONDARY TO PRODUCTIVITY OF HUMAN RESOURCES

- EMPLOYEES ARE VITAL ASSETS; UNION IS KEY LINK TO THE EMPLOYER

- EMPLOYEE PARTICIPATION AND COMMUNICATIONS ARE VITALLY IMPORTANT

- MANAGEMENT SHOULD:
  - HAVE FEW LAYERS OF GOOD MANAGERS
  - BE STRONGLY INVOLVED IN MANAGING THE BUSINESS

SO WHERE'S THE BEEF?

IN EMPLOYEE BELIEFS:

- TQC IS THE KEY TO SUCCESS

- QUALITY AND PRODUCTIVITY GAINS ⇨ PROFITS
    - THAT'S GOOD FOR THE COMPANY
    - WHAT'S GOOD FOR THE COMPANY IS GOOD FOR ME
    - UNPRODUCTIVE WORK IS WASTEFUL AND DEMOTIVATING: PRODUCTIVITY IMPROVEMENT THROUGH INDIVIDUAL AND GROUP ACTIVITIES PROVIDES SELF-FULFILLMENT AND JOB ENRICHMENT

- RECOGNITION FOR ACCOMPLISHMENTS IS IMPORTANT, BUT STATUS IS QUITE UNIMPORTANT

- UNIONS ARE CONSULTANTS TO MANAGEMENT ON BUSINESS- AND EMPLOYEE-RELATED MATTERS

PRODUCTIVITY IS AN ATTITUDE OF MIND

- PRODUCTIVITY IS BELIEVING THAT
    - PROGRESS IS ACHIEVED BY SEEKING INNOVATIVE WAYS TO IMPROVE THAT WHICH EXISTS
    - WE ARE ABLE TO DO BETTER TODAY THAN YESTERDAY, AND LESS WELL THAN TOMORROW

- PRODUCTIVITY IS HAVING THE WILL TO
    - IMPROVE ON THE PRESENT, NO MATTER HOW GOOD IT MAY SEEM OR MAY REALLY BE
    - ADAPT CONSTANTLY TO CHANGING ECONOMIC AND SOCIAL CONDITIONS
    - CONTINUALLY APPLY NEW METHODS AND TECHNIQUES

- PRODUCTIVITY IS FAITH IN HUMAN PROGRESS

SO WHAT ABOUT THE FUTURE?

- MANY MYTHS EXIST

  — THE GURUS PROMOTE THEM AND THEIR BIASED POINT OF VIEW
  — LOOK DEEPER AND SATISFY YOURSELF

- THE CULTURAL DIFFERENCES WILL CONTINUE TO EXIST

  — TRY TO UNDERSTAND THEIR SIGNIFICANCE
  — DON'T TRY TO ADOPT THEIR CULTURE, BUT DON'T WORRY
    ABOUT IT EITHER

- MANY OF THEIR METHODS AND PROCESSES HAVING MERIT ARE
  TRANSFERABLE
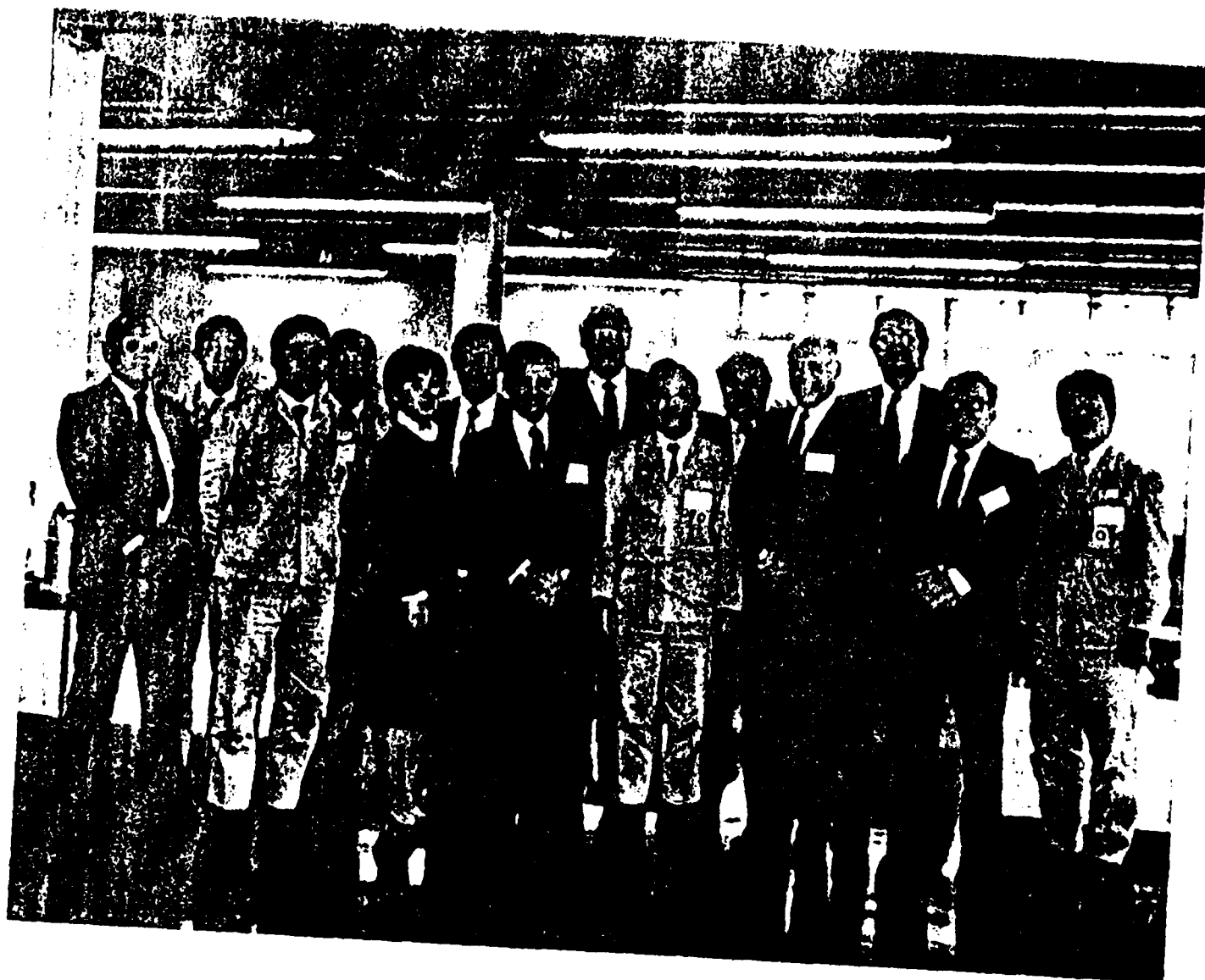
EMPLOYEE NEEDS ARE INEXTRICABLY LINKED TO ORGANIZATION NEEDS

GREATEST MANAGEMENT CHALLENGE
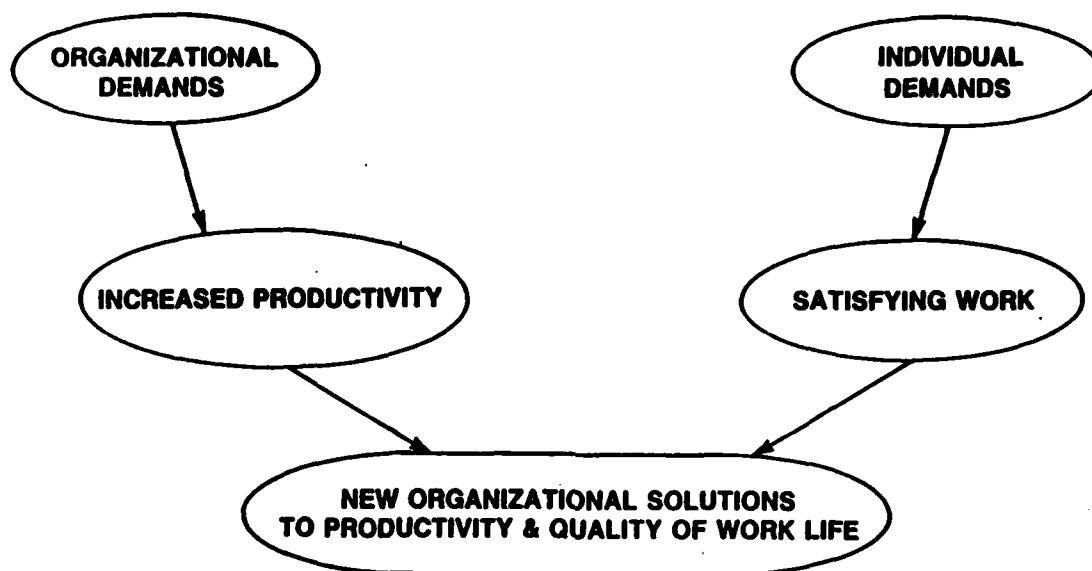
NEITHER CAN BE MET AT THE OTHER'S EXPENSE

AVCO
SYSTEMS DIVISION

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The full text of General Welch's remarks appear in the immediately following pages.

ADDRESS BY GENERAL LARRY D. WELCH, USAF

VICE CHIEF OF STAFF, UNITED STATES AIR FORCE

TO THE

NATIONAL FORUM ON HUMAN RESOURCE PLANNING

FOR PRIVATE SECTOR AND DEFENSE LEADERS

9 MAY 1985

Thank you, Dr. Korb.

It's a pleasure to spend this brief period with the participants in what we hope will become an annual event. Let me add my appreciation for the commitment and generosity of our private sector colleagues who are giving their valuable time and concentration to this important aspect of our business. And, I also appreciate the opportunity to share a few thoughts on the subject that always tops our Air Force priority list and that of the other Services -- that is the whole business of attracting, recruiting, training, managing, motivating, and retaining the quality of people it takes to build and sustain adequate military forces.

While I realize the interest of this group is broader than just military forces, I presume you will forgive me for concentrating on the subject of most immediate interest to me. In any case, it's clear to me that the drivers of human resources planning in the military forces have much in common with the private sector challenges.

While we continue to do well at building quality military forces manned by quality people, we are, nonetheless, seized with the need to do much better.

Beyond the normal drive to do everything better, there are other compelling reasons for our preoccupation. I see three forces demanding better planning and execution in the human resources area. The first two are largely economic. In our armed forces business, as in the private sector, a major part of the cost of doing business is people. Secondly, we compete with an increasingly robust economy for the available pool of high quality people, and that competition will become more, not less, intense.

The third driver is the most immediately compelling and also the most frustrating. The increased investment in modernization and growth over the past four or five years produced, and will continue to produce, corresponding growth in the demand for both quality and quantity of military and civilian manpower.

But, it's painfully clear that Congress is not likely to agree to provide that manpower. We see a continuing mismatch between the willingness of the Congress to approve dollars to invest in new equipment and their reluctance to approve the manpower that must go with that equipment. And that mismatch remains even as the willingness to provide equipment dollars wanes. We could spend a lot of time on the apparent reasons for that mismatch but for the moment, it's just a fact of life. Over the past four years, the Air Force has been authorized less than 1/2 the manpower growth associated with fielding new equipment, and we see clear indications that trend will continue. Those facts alone demand that we find ways to increase productivity, but beyond that, it is as clear to us whose end products are deterrence and military capability, as it is to those who compete on an economic basis, that nothing can leverage our investment as powerfully as increasing the productivity of our people.

You understand at least as well as I how complex that subject is, but let me mention some factors that seem to me to be the most compelling in my business and concentrate on just one of those factors.

But, before I talk anymore about productivity, it's probably useful to define our specific products. I mentioned the overall result is deterrence and war fighting capability; but the most specific, most measurable ingredients that add up to those outcomes in daily operations are equipment readiness and training.

There are obviously lots of essentials that surround those -- strategy and tactics, infrastructure, positioning of materials, morale of the force -- all very important, but more equipment readiness and training are the most direct, measurable outputs of increased productivity.

As to the most directly controllable opportunities to increase productivity in the two areas I've mentioned, the first is the most straightforward -- providing the right kinds of people and materiel resources at the right place, at the right time, in the right amounts. We do well in recruiting and initial qualification training of people. We do reasonably well in retaining our experienced people although further tinkering with compensation -- to include retirement -- can destroy that overnight, but that's another subject. And we do well in providing the material wherewithal to do the job. The second factor is setting attainable standards and goals that the producers believe are attainable and necessary. We have work to do there and doing that is not as useful as it should be until we do better at the third step. And that third, and by far the most important step, is decentralizing authority and responsibility so there is a line individual with the clear authority and responsibility and accountability

for a specific piece of our business. I'll come back to that but the last two factors are also straightforward -- measuring how well that business is being accomplished and rewarding success while withholding reward from those who don't succeed.

I presume no one will find fault with any of those factors but let me just focus more specifically on what I have already identified as the most key element, and that is decentralizing authority and responsibility so there is a line individual with clear authority and responsibility for a specific piece of our business. The private sector has proved over and over again how well that works so it's not a startling new idea. I single that factor out because there seems to always be a powerful pull to drag authority to higher levels, particularly in large enterprises with layers of management -- and government is such an organization.

As one element of that pull, we found in the Air Force, for example, that what could and should and will be a great boon to productivity -- data auto-mation -- had also become an unholy force for elevating authority levels. The process, once examined, was simple enough. Data automation made it possible to provide great volumes of detailed information at the top. That coupled with the natural arrogance of higher headquarters led to both the proclivity and the apparent means of making more and more decisions at higher and higher levels. Unfortunately, the resulting micromanagement from higher levels led to more reports and more information flow to the top.

All that was and is aided and abetted by levels outside the Services. As just one example, I read a paper a few weeks ago that reported that Congress tasked DoD for <u>458</u> special reports in 1984 on top of over 1,300 appearances by

senior witnesses before 96 committees and subcommittees totaling over 2,100 hours of testimony. That was along with 85,000 written queries and over 600,000 phone calls. The result of all that is that we provide levels of detail to the U.S. Congress about such things as wing level logistics that I didn't need to know as a Wing Commander.

None of that is intended as an indictment of data automation or the Congress' thirst for information, but simply as an illustration of where events can take us if we lose sight of what drives productivity up and what, on the other hand, stifles the interest and energy of people at the production end of our business.

I am reminded of Cohn's Law, provided me by a friend in the Israeli Air Force. It says, "The more time we spend in reporting on what we are doing, the less time we have to do anything. Stability is achieved when we spend all our time doing nothing but reporting on the nothing we are doing".

To reverse that trend, the Air Force launched a concerted drive to refocus on decentralized execution, with the very helpful support of the Deputy Secretary of Defense. I say to refocus because Air Force combat doctrine -- inherited from the Army -- has always demanded centralized assigning of missions and resources and very much decentralized direction of the use of those resources to accomplish those missions.

We started with a restatement of those principles signed by the Secretary of the Air Force and the Chief of Staff. We invited field commanders to participate much more fully in our programming and budgetary and therefore our goal setting process. We started a careful review of the purposes and uses of

data automation. For example, we are chasing down the uses of all reports to higher levels. The initial effort was to concentrate on one of our larger bases to track down both ends of the information pipe. You won't be surprised to know that in all too many cases the pipe emptied into emptiness. Someone generated the requirement for information, but no one was using it. In the short time we've been engaged, we've eliminated 268 reports. And I think that's just a start. One thing is clear -- much of that information flow aided and abetted inappropriate centralizing. It does not add to quality of decisions and certainly does not add to productivity.

In any case, productivity is not driven nearly so much by the quality of management decisions -- important as those may be -- as by the quality of the execution. It's the commitment and dedication of the people at the point of execution that drives productivity.

About six years ago, one of our field commands, in which I served, began to decentralize authority with a vengenance. Among the reasons were continually declining training output, measured in training sorties, and declining equipment readiness.

The process of doing that was simplicity itself. The approach was to initially adopt as standards those already being met by the best producers. We then filled every unit to full resources until the resources ran out, leaving the remaining two or three units virtually empty. That eliminated a prime excuse for non-performance. Management concentration was shifted from evaluating the process to measuring the product. And the units were told they could run their business their way within certain guidelines, but they were expected to meet the production standards. They were absolutely accountable for

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the outcome, and that outcome was carefully measured and evaluated. As a part of proof of accountability, if the unit completed their monthly production, measured in training sorties and equipment readiness, three days before the end of the month, they could go fishing. If they fell behind, they could work Saturday and Sunday.

That gave every man in the unit a direct stake in the outcome and very quickly, gold brickers became pariahs and the troops worked not only harder but smarter. At the same time the leadership found ways to provide more professional workplaces on the theory that if we expect a quality performance, we owe a quality workplace. We provided quicker access to tools and spare parts and all the wherewithal to get the job done, because now the troops accountable for production demanded that higher levels of management concentrate on what helped that production, not on what process was used.

I am totally convinced from that and other experiences that we not only get more productivity from decentralizing responsibility and authority but we also get smarter decisions from the commander or supervisor on the scene. He or she has the most direct stake in the outcome of that decision and can concentrate full attention on the execution of that decision. Furthermore, it builds human resources for the future. Nothing builds managers and leaders like responsibility and authority.

Part of the resistance to decentralizing comes, of course, from the layers of intervening managers since they perceive a threat to their functions. They are, of course, absolutely right.

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But, to return to the broader subject of human resources planning, let me just reiterate that quality people, properly trained, motivated and compensated are clearly the key to success in our military business as in yours.

I will read with great interest your thoughts on that very complex subject. I thank you for your attention to mine.

ADDRESS BY DR. GEORGE A. KEYWORTH, II, SCIENCE ADVISOR TO THE PRESIDENT OF THE UNITED STATES

The full text of Dr. Keyworth's remarks appear in the immediately following pages.

ADDRESS BY DR. GEORGE A. KEYWORTH, II

SCIENCE ADVISOR TO THE PRESIDENT, AND

DIRECTOR, OFFICE OF SCIENCE AND TECHNOLOGY POLICY,

EXECUTIVE OFFICE OF THE PRESIDENT

TO THE

NATIONAL FORUM ON HUMAN RESOURCE PLANNING

FOR PRIVATE SECTOR AND DEFENSE LEADERS

10 MAY 1985

"DOD AND UNIVERSITIES IN THE NEW COMPETITIVE ERA"

I want to talk about two things today. One is the new competitive era in which America finds itself in the 1980s, an era in which both our industrial and military leadership are strongly challenged. My other subject is the dependence -- and I do mean dependence -- of the Defense Department on the nation's universities.

One of the lessons we've all learned in recent years is just how adaptable we have to be in a world that's changing as fast as it is. Just as the growing might of the Soviet military machine has forced us to reexamine and reassert our own commitment to defense, the impressive emergence of Japan and other Asian countries as industrial leaders has forced us to think hard about our own industries, educational systems, and economic prospects. Certainly, the attitudes of people in the United States have been profoundly affected by the realization that our competitors are taking our traditional strengths head-on.

For example, not too long ago U.S. industries strongly dominated the world's markets for the simple reason that U.S. industries were so far ahead in the development of new industrial technologies. But in the past decade that situation has changed significantly. The rise of strong foreign competition means that U.S. industries no longer have the luxury of setting the pace at which new technologies are introduced. And, increasingly, we see evidence that the Soviets are narrowing the gap between them and us in deploying new defense technologies -- even though they're notorious for helping themselves to our own inventions. Clearly, in areas of both civilian and military technologies, others have been working faster than we have.

The obvious concerns about this new era of competition led the President, about two years ago, to establish a Commission on Industrial Competitiveness. I don't propose to go into details about the findings or recommendations of this landmark effort. However, I do want to share their insights about competitive advantages, because I believe they apply in large measure to both industrial and defense needs. Compared to many of our competitors, American industries operate at a competitive disadvantage in many ways. These include a large disparity in labor costs, disadvantageous currency exchange rates, high costs of capital in the U.S., and inequities in the ability of our industries to penetrate some foreign markets.

On the other hand, we do have significant competitive advantages, in fact potentially overwhelming advantages, in two allied areas: our technology and our highly skilled technical talent. And that, in a nutshell, is the reason that science and technology have become such important parts of government policy.

The Reagan Administration's response to this critical dependence on knowledge and talent has been to allocate very large increases in Federal support for basic research, which grew by 55 percent over the past four years. At the same time, government has been reducing its role in development of the kinds of commercially oriented technologies that industry was far better qualified and motivated to do.

For example, in 1981 technology development was the largest portion of our Federal R&D budget, and it claimed 42 percent of government supported non-defense R&D; in just four years it dropped to 27 percent and became the smallest component. And at the same time, basic research climbed from 27 percent to 38 percent, from the smallest to the largest component.

I should interject an explanation here. Basic research, or the pursuit of frontier knowledge, is valued by society for many reasons, not the least of which is that the search for new knowledge satisfies a fundamental human curiosity. However, the Federal government's focus on support for basic research stems from more concrete benefits that are returned to the society that pays for the research. The first is the way basic research, as opposed to direct development of technologies, can vastly expand the base of scientific and technical knowledge. That's a high-leverage investment, because that knowledge then becomes the foundation for innovation in industry and defense, as well as for advances in areas like medicine and environmental quality. The other major benefit we reap from investment in basic research -- especially basic research in universities -- is the stimulation and education of new talent. Our continued industrial and defense leadership and our ability to remain competitive depend directly on the quality of that next generation of scientists and engineers.

How, then, do those observations relate to the serious -- and growing more serious -- problems of human resource planning for defense. I said earlier that I wanted to talk about the dependence of DoD on those same universities in which we're concentrating those significant increases in support for basic research. Let me elaborate.

There was a time, in the decades after World War II, when the relationship between our major research universities and the Department of Defense was very close and very productive. In fact, the DoD-university partnerships were one of the great success stories of our nation. DoD's enlightened, talent-oriented support of broadly defined areas of science and technology relevant to defense was a major factor in the growth of many of today's premier research universities -- places like MIT and Caltech.

That partnership produced breakthroughs in areas from mathematics to oceanography. And it stimulated thousands of our best young minds to enter scientific and technical careers. But we should remember that as great as those gains were for U.S. educational institutions and American scientific leadership, they were greater for national defense. The DoD received tremendous returns on those investments in terms of both new knowledge and superb talent.

Consider, for example, how DoD support of research in atomic physics by a young professor at Columbia University led to the laser, which is now a basic component in weapons systems, navigation, communications, and even in the precision manufacturing of those military systems. Likewise, research in magnetism at MIT led to the magnetic core memory for early military computers. Mathematics research at Princeton proved to be key to radar frequency analysis.

Shock dynamics at Harvard led to practical nose cone materials. Nonlinear acoustics at Brown led to *covert echo sounders on submarines.* And perhaps equally important, support for research like that also produced the <u>people</u> who could apply new knowledge and new concepts to defense needs.

That historic relationship led to America's still-unmatched, post-war preeminence in science. I believe that no other Federal mechanism has supported American science with a comparable singleminded focus upon excellence -- excellence in choosing the kinds of research to be pursued, and excellence in the people performing that research.

But, unfortunately, since the Mansfield Amendment took hold in the late 1960s that partnership has deteriorated. The Defense Department, our universities and students, and the nation as a whole have been the losers. During the 1970s both the national climate and alternative sources of support for science diverted academic research from defense objectives and severely weakened those truly productive DoD-university links. And once academic researchers stopped thinking aboud DoD research, and once DoD officials dismissed universities as important sources of new ideas and talent, the two groups started drifting apart.

That drift was exacerbated by decreasing funding for DoD research and exploratory development, the so-called technology base. During the 1970s we followed a course that gave relatively low priority to activities aimed at assuring our technological superiority in the future. And an unfortunate result of decreased research funding in DoD was the fact that most of the cuts occurred in university programs. Not surprisingly, as budgets became tighter, research

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and exploratory development in DoD's own laboratories tended to be preserved, and external research was cut back.

Now, I'm not going to pretend to know precisely what the time lag is between laboratory concept and putting a given technology into the field with the operating forces; and, of course, that time varies depending on the complexity of the technology. However, we do know that failure to invest adequately in the technology base has its effects 5, 10, or even 20 years down the road -- and I think we're feeling some of those effects today.

The investment in DoD research reached its lowest point in the mid-1970s and has been gradually r covering. When I first came to my present job, I was greatly disturbed about the rate of that recovery. I discussed this problem with Secretary Weinberger, who shared a like concern. His efforts have resulted in a much healthier growth rate in the past few years, and I think we're headed back toward a more prudent level of investment.

This restoration comes none too soon. Today we confront a far more challenging world than we did in the post-war years. Faced with Soviety superiority in numbers of weapons and troops, we rely more and more on technology to maintain the security of the free world. That important measure of technological leverage -- the force multiplier -- has been neglected for too long. And, two generations after the last World War, other nations have recovered from the ravages of conflict and now challenge our economic growth with their own vigor and ingenuity. The new spirit of competition is seen in a perversion of an old American slogan -- now it's a Sony in every living room and a Toyota in every garage.

Consider how different that is from the decades after World War II, when technology spinoffs from U.S. R&D, particularly defense R&D, helped lay the foundation for some of the world's most successful industries -- such as computers, semiconductors and integrated circuits, and commercial airplanes. In those years a pattern emerged in which industry drew heavily on and prospered from the products of government's R&D.

But, to a large extent, that's no longer the case, because in the past few decades the commercial technology market has grown so remarkably. Today in the United States, industry, no longer government, is pushing hardest at the frontiers of technology. The result has been a dramatic shift in relationships, and now the government relies heavily on industry to provide it with the technology it needs. It means that defense needs depend as never before on technological advances in other sectors of society, and it means defense must build bridges to those sectors and the people who lead them. And for those reasons, today our competitiveness across the board -- in defense and civilian areas -- relies to an inordinate extent on our universities -- both as the basis for our leadership in science and technology and as the source of new scientific and technical talent.

What made the DoD-university partnerships so productive in the past was a singleminded dedication to the support of excellence. Because DoD has a single mission -- national security -- it was, and is, able to seek out the best minds in the academic research community to work on problems of interest to defense. I think you would agree that the examples I mentioned earlier, which are truly only the tip of the iceberg, are indicative that DoD's approach to the selection of and support of talent in universities has paid off handsomely.

What about the future? The technological challenges we face are greater than ever. For example, we need research in mathematics to solve problems in image correlation for smart weapons and control systems for aircraft. We need more knowledge in the area of artificial intelligence to improve robotics and solve command and control problems. We need a better fundamental understanding of the properties of composite materials for a variety of weapons systems. All these and many more equally challenging areas of research make it imperative that we attract the best researchers to work on defense programs. Special initiatives are needed to identify these researchers early in their careers and support them in areas of potential interest to DoD.

There's another area where we can do a far better job of making use of talent, and that's in the scientific and engineering workforce of the Federal government -- more than 40 percent of which is in the Defense Department. Two years ago David Packard headed a panel of my White House Science Council that looked at the 18-billion-dollar-a-year operation of the Federal laboratories. That's known as getting a big businessman to look at a big business. Well, among the Panel's conclusions was that such factors as non-competitive pay, as well as cumbersome administrative procedures, made it hard to hold onto the best people. As a result, we've proposed legislation that will help the Federal labs compete with industry by offering market-based salaries and streamlined administrative procedures to attract and to retain more of the first-class talent who are so desparately needed to keep defense in particular at the forefront of new technology. Right now that legislation is being considered by a cabinet council working group.

As I said, we've also been concerned about the level of DoD support for basic research. Even though the rate of growth is increasing, it still lags

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considerably behind the growth in other areas of R&D. For example, DoD's share in R&D has moved from 25 percent to 35 percent of the total national investment, but its support of basic research has only increased by one-eighth of that amount -- from 6 percent to only 7 percent of the U.S. total. We can characterize this situation in two different ways. First, technology draws upon science the way you or I might draw interest from an investment. And we are simply spending that interest faster than the size of our investment in capital will sustain. More specifically, technology depends on new talent, and our failure to ensure enough new talent is a real threat to future defense leverage through technology.

For that reason, I've been extremely encouraged by the Armed Services' plans for a university research initiative, a formal mechanism by which DoD would support not only individual projects, but also support interdisciplinary centers, instrumentation, and, perhaps most important, young investigators.

This initiative, if it can achieve a reasonable level of funding over the next few years -- and I would say that ought to be on the order of several hundred million dollars annually -- will be important for several reasons. One is that it focuses on talent and excellence and aims at attracting a new generation of university researchers to address defense problems. Another is that it emphasizes not only single investigator activities but multi-disciplinary approaches as well. Last, but not least, it will be immensely symbolic of the renewal of that DoD-University synergism which has served us so well in the past.

One of the most remarkable changes that we've seen in this country over the past four years has been our change in attitude about industrial competition.

We in the U.S. certainly have responded in a healthy way to the industrial and technological challenges that we've confronted in the past generation. Admittedly, at the start of this decade we were to some extent confused by the nature of the new competition we faced; our experiences of relatively easy market domination in the past hadn't prepared us for the embattled new role we found ourselves cast in.

That experience, I'm convinced, will turn out to be healthy in the long run, because it's forcing us to reexamine and reaffirm the principles on which our economy is built, and it's forcing us to recognize the extent to which we had dulled our initiative by taking our own industrial strengths for granted. Today we not only have a more life-sized view of the nature of our competition, but we also have a more realistic view of our own significant capacity to compete. So to the extent that one can characterize a national mood, I would say that the American people and American industry are more optimistic today than they've been in years, and they're looking forward to a healthy economic future.

I can't resist sharing one example with you. Last month, at a small lunch that President Reagan had with some leaders in American high-technology, one of the guests reached into his pocket and pulled out a wafer fresh off a new manufacturing production line making one-megabit RAM chips. In displaying it he was reminding us that only four years ago many people were ready to write off American manufacturers of RAM chips because the Japanese had presumably captured the future markets with their then-advanced 64K RAMs. So he wanted to remind us that listening to pessimists can be very bad business practice. Fortunately, his company and others had confidence in their abilities and, clearly, they've bounded back with a vengeance.

I think the lesson of industry is one we have to adapt for defense -- and if we do, then we'll see similar kinds of enthusiasm and optimism. Industry is rapidly learning how to take advantage of those two competitive edges of technology and talent. Our real challenge in defense is to do the same, to make much better -- and faster -- use of new technology in developing new defense systems. But to do that we have to rethink the way we develop resources. I'm pleased to see this conference focusing on critical questions of human resource development, and I hope we'll see some aggressive attempts to use the ideas discussed here to once again reflect the highest levels of American technological achievement in our national defense.

SECTION 3

NATIONAL FORUM ISSUES, PROCEEDINGS AND

PANEL REPORTS

In his welcoming letter to the participants, Assistant Secretary Korb, as Forum Sponsor, summarized both the broad parameters of the human resource planning issues to be addressed, and the desired outcome of the proceedings.

THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON D C 20301 4000

MANPOWER,
INSTALLATIONS
AND LOGISTICS

May 8, 1985

Dear Forum Participant:

Welcome to the National Forum on Human Resource Planning for Private Sector and Defense Leaders.

Many management, manpower, training, and personnel problems are common to both government and industry. As we look to the next decade it is clear that a sharing of the best thinking and experience of both sectors could be mutually productive in the national interest.

Indeed, such an exchange can be critically important in an era of fiscal constraint, economic challenge, massive technological change, and evolving new individual and social value patterns. Human resource complexities in this environment challenge each of us to most efficiently and effectively manage our people.

We open this Forum in a search for new and better ways to do so. Our prime objective is to explore the issues, determine those areas where a continuing exchange will be useful, and identify the mechanism for sharing and a vehicle for future dialogue.

Your personal involvement is vital to the achievement of this objective. It is the essential element in beginning a continuing dialogue between the government and the private sector on the Nation's most urgent human resource management challenges.

Sincerely,

Lawrence J. Korb

As summarized in preceding Sections of this Report, the bulk of available time during the Forum proceedings was devoted to a personal exchange between private sector and government leaders. From the outset, this interchange was seen as the heart of the Forum's purpose -- the essential first step in beginning a continuing dialogue between the government and the private sector.

To assure reasonable coverage of the many important issues facing human resource planners, and to fully exploit the relatively brief time available for that purpose, the Forum participants were:

- Assigned, based on an assessment of their primary areas of expertise, to one of 10 separate subject area Panels, numbered 1 through 10.

- Furnished with at least three Issue Papers developed for consideration by their respective Panels, as a means of stimulating thinking and suggesting potentially fruitful directions which a continuing dialogue might profitably take.

- Furnished with copies of the full set of Issue Papers provided to all Panels (a total of 35 Issue Papers for the 10 Panels).

- Informed that neither the titles of their respective Panels, nor the Issue Papers officially provided to them, were designed to channel, limit, or constrain their deliberations in any way.

Consonant with these broad guidelines, each Panel prepared a draft report of its proceedings, and furnished that draft to the Forum's Administrative Support Center (ASC) at the close of Panel proceedings on 9 May 1985. Using

word processors, the ASC returned the typed drafts to the Panels for their review/revision on 10 May 1985. Prior to adjournment on 10 May, each of the private sector executives occupying the 10 Panel Chair positions presented a summary of their respective Panel results to the assembled Forum participants.

The immediately following sub-sections of this Report list the numerical designations and titles of each Panel, and include concise descriptions of each Issue Paper originally furnished to each Panel.

Ten Appendixes to this Report, numbered to correspond with their respective Panels, subsequently present:

- The full name and affiliation of each Member of each Panel, and of the Recorders/Observers who sat with and supported each of the Panels.

- The full text of each of the 10 Panel Reports.

- The full text of each Issue Paper originally presented for Panel consideration.

PANEL 1 - PRODUCTIVITY IMPROVEMENT

The Panel 1 Report is presented in Appendix 1. Summarized below are the numerical designations, titles, and descriptions of Issue Papers originally presented to Panel 1:

1-A **ORGANIZING AND MANAGING FOR INCREASED PRODUCTIVITY:** Organizational and management techniques to boost worker productivity; lessons U.S. companies can learn from the successes and failures of European and Japanese productivity initiatives in management innovation; and how rapidly evolving technological change affects human behavior in the workplace.

1-B **IMPLICATION OF ROBOTICS AND OFFICE AUTOMATION:** The potential of robotics and office automation to enhance productivity and work life; the human factors they affect; and the less obvious cost implications.

1-C **DOWNSIZING MIDDLE MANAGEMENT AND STAFF:** Whether increased access to "operational" information through automation permits (1) reducing the size of mid-management staffs, and (2) expanding the manager's span of control without impairing efficiency and productivity.

1-D **ORGANIZATIONAL STRATEGIES FOR MANAGEMENT CHANGE AND OBSOLESCENCE:** Developing organizational strategies and institutional mechanisms to (1) deal with the management changes emerging from productivity enhancement initiatives, and (2) assist in both avoiding obsolescence and coping with the turbulence of change in an era of rapidly advancing technology.

PANEL 2 - HIGH TECHNOLOGY — MEETING THE EMPLOYMENT NEEDS

The Panel 2 Report is presented in Appendix 2. Summarized below are the numerical designations, titles, and descriptions of Issue Papers originally presented to Panel 2:

2-A **DEMOGRAPHICS OF THE WORKFORCE:** The shrinking youth cohort and aging workforce; migration and immigration; the implication of these factors for human resource planners; and the balance between the size and technical qualifications of the workforce and those desired by employers.

2-B **RECRUITMENT CHALLENGE:** The kinds of recruiting and related personnel strategies devised by organizations to deal with the foreseen demographic and behavioral changes in the workforce.

2-C **HUMAN RESOURCES FORECASTING:** The forms of forecasting available for planning and managing employment requirements, and their suitability for computer modeling.

PANEL 3 - EDUCATION (TRAINING AND RETRAINING)

The Panel 3 Report is presented in Appendix 3. Summarized below are the numerical designations, titles, and descriptions of Issue Papers originally presented to Panel 3:

3-A CORPORATE NEEDS; MILITARY NEEDS; AND INDIVIDUAL NEEDS: How the private sector and the military might foster increased numbers and enhanced technical capabilities of graduates from the American education system; the role of training and retraining programs in reversing the trends toward decreasing technical capabilities among that system's graduates.

3-B IMPACT OF HIGH TECHNOLOGY: How we can make better use of education and training resources to avoid shortages of skilled personnel in fields experiencing rapid technological change.

3-C RETRAINING WHOM? WHEN?: The factors influencing an organization's retraining decisions; criteria for selecting candidates; physical, psychological, or other impediments to retraining employees at particular stages in their career cycles.

PANEL 4 - CHANGING ORGANIZATIONAL CULTURES

The Panel 4 Report is presented in Appendix 4. Summarized below are the numerical designations, titles, and descriptions of Issue Papers originally presented to Panel 4:

4-A PLANNING AND MANAGING CULTURAL CHANGE: The potential benefits of keeping institutional or corporate cultures in harmony with that of society at large in terms of worker satisfaction, communications, and overall effectiveness.

4-B **PERSONAL VS. PROFESSIONAL ETHICS:** The differences (if any) between professional and personal ethics; the potentially detrimental effects on organizational performance caused by conflicts between professional and personal standards.

4-C **RECONCILING INSTITUTIONAL AND PERSONAL VALUES IN A CHANGING SOCIETY:** How conflicts between personal and institutional values affect organizational efficiency; reconciling these issues in a changing society; the scope of potential conflicts; and the potential for turning apparently contrasting value systems into assets for the organizational culture.

PANEL 5 - DEVELOPING CAREERS

The Panel 5 Report is presented in Appendix 5. Summarized below are the numerical designations, titles, and descriptions of Issue Papers originally presented to Panel 5:

5-A **CAREER-PATH PLANNING:** Reasons for the renewed attention to planning career paths; the benefits of such planning as a recruiting tool and retention device; and the potential for using a well-designed, clearly described career development model to improve staff relations and performance.

5-B **IDENTIFYING POTENTIAL CANDIDATES FOR TRAINING, BROADENING, AND LEADERSHIP:** Ways to identify high-potential leadership candidates; the typical characteristics or behaviors, if any, exhibited by the best prospective leaders.

5-C **PLANNING SENIOR MANAGEMENT SUCCESSION:** The problems associated with senior management succession; averting potential crises in authority through improved planning; the factors that contribute to the failure of succession planning.

PANEL 6 - MANAGING A LEAN WORKFORCE

The Panel 6 Report is presented in Appendix 6. Summarized below are the numerical designations, titles, and descriptions of Issue Papers originally presented to Panel 6:

6-A **CHANGING MANAGEMENT STAFF ROLES:** The appropriateness of traditional organization structures for dealing with contemporary problems; whether accelerating information technology is eliminating the need for some middle managers; the capacity of CEOs to cope effectively with the complexity of large, technologically advanced companies.

6-B **FEWER LEVELS OF MIDDLE MANAGEMENT:** Whether costs can be reduced and productivity increased by reducing the number of levels of middle management; where and how this principle can be applied; where the line is drawn between excessive and inadequate middle management levels.

6-C **CONTRACTING OUT/CIVILIAN SUBSTITUTION/PART-TIME WORKERS:** Circum-stances in which these labor-substitution alternatives are

inappropriate or infeasible; the need to re-evaluate the reluctance to use civilians in some military functions; and the possibility of resolving such real or perceived incompatibilities.

6-D **DIRECT VS. INDIRECT WORKER RATIOS; COMBAT VS. SUPPORT RATIOS:** The need to reduce the use of resources that don't directly generate a "primary mission" product or service; reevaluating the mix of direct and indirect resources as technology changes.

PANEL 7 - PERSONNEL INNOVATION AND MANAGEMENT

The Panel 7 Report is presented in Appendix 7. Summarized below are the numerical designations, titles, and descriptions of Issue Papers originally presented to Panel 7:

7-A **WORK SIMPLIFICATION:** *Employing robotics, automation, traditional industrial engineering techniques, and employee participation to increase productivity through work simplification; effective work simplification techniques vs. faddish and counterproductive measures; controlling employee perceptions of threat.*

7-B **MANAGING CHANGE AND OBSOLESCENCE:** Special considerations for managing people whose jobs are changing or becoming obsolete through economic developments, technological advances, or new management techniques.

7-C **PLANNING AND INNOVATIONS:** Ways organizations can efficiently adapt human resource planning to changing technologies, product lines, financial structures, and marketing trends; the role of planning and planners in this adaptation; distinguishing counterproductive fads from new ideas that offer potential solutions to modern management problems.

PANEL 8 - QUALITY OF LIFE: THE WORKFORCE AND THE FAMILY

The Panel 8 Report is presented in Appendix 8. Summarized below are the numerical designations, titles, and descriptions of Issue Papers originally presented to Panel 8:

8-A **WORKING CONDITIONS:** Modifying the physical and psychological work environment to generate more output and faster turnaround times per unit of labor input; the effect of work requirements on family life; what organizations can do to accommodate the family obligations of working parents.

8-B **PHYSICAL FITNESS PROGRAMS:** The relationship between physical fitness programs, higher employee morale, worker productivity, and absenteeism; current corporate policies on physical fitness programs.

8-C **DUAL-CAREER FAMILY:** The problems associated with dual-career families and their increasing number; the effects of these problems on the employer; how organizations are assisting employees in dealing with the adverse effects of stress induced by dual careers.

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8-D **FAMILY LIFE:** The increasing incidence of occupational stress and its impact on family life; new social values resulting from the increasing number of dual-career couples; society's ability to deal with how increased labor-force participation among women affects family relationships; what organizations and individuals can do to assist each other.

PANEL 9 - RETHINKING REWARDS AND INCENTIVES

The Panel 9 Report is presented in Appendix 9. Summarized below are the numerical designations, titles, and descriptions of Issue Papers originally presented to Panel 9:

9-A **PAY, PAY PROSPECTS, RECRUITING DIFFERENTIALS, AND RETENTION DIFFERENTIALS:** The best methods of achieving desired staffing and manpower goals in an increasingly competitive market for qualified professionals; why salaries and sign-on and retention bonuses are becoming an area of greater concern for employers.

9-B **JOB VALUES AND REWARD SYSTEMS:** An assessment of job evaluation plans, which were intended to establish job values; the role of job families, with supporting reward systems that pay for performance.

9-C **RELATING PAY TO PERFORMANCE -- PERFORMANCE-BASED PAY AND MONETARY REWARDS:** The validity and usefulness of performance-based pay variations as motivational tools; the successes and failures of such systems; the hidden dollar and social costs.

9-D **BENEFITS, "PERKS", AND STATUS:** New benefits and "perks" as competitive tools in the labor market; their effects on employee loyalty, productivity, and personal well-being; which rewards and incentives are most effective.

9-E **HEALTH CARE AND HEALTH CARE COSTS:** The lack of incentive for employees to use their coverage prudently under noncontributory health care plans; the effects of proposed taxation of such plans; flexible plans as useful alternatives and as a means for controlling and reducing health insurance costs.

PANEL 10 - RETIREMENT

The Panel 10 Report is presented in Appendix 10. Summarized below are the numerical designations, titles, and descriptions of Issue Papers originally presented to Panel 10:

10-A **OBJECTIVES VS. ACHIEVEMENTS -- CIVILIAN AND MILITARY:** The effectiveness of the military retirement system in achieving its primary objective, maintaining national military readiness; the effectiveness of retirement pay levels in the private and Federal civilian pay sectors in providing sufficient income to maintain a reasonable standard of living for the employee; the effectiveness of the military system in this regard.

10-B OPTIONS FOR CHANGE: Assessing the relevance of prevailing retirement and pension policy assumptions and formulas in today's economy and society; possible changes in public and private sector policies to recognize trends in the labor market and in retirement planning, such as increased job mobility and the popularity of individual, tax-deferred savings plans.

10-C CROSS-SECTOR HIRING OF RETIREES: Strategies for hiring retirees across both the public and private sectors in the forecast environment of an aging population, declining youth cohort size, selected geographic and occupational labor shortages, and changing attitudes toward older workers; problems associated with hiring retirees.

APPENDIX 1

PANEL 1 REPORT: PRODUCTIVITY IMPROVEMENT

NATIONAL FORUM ON HUMAN RESOURCE PLANNING

FOR PRIVATE SECTOR AND DEFENSE LEADERS

PANEL 1 REPORT

PRODUCTIVITY IMPROVEMENT

1. INTRODUCTION

Panel 1 was chaired by Dr. James Harrington, with Lieutenant General W.R. Maloney, serving as assistant chair. Table 1-1 lists all Panel members as well as recorders and observers, together with their respective primary private or public sector affiliation.

The Panel first brainstormed items that affect productivity. These were classified and prioritized as shown in Tables 1-2 and 1-3.

The next step was to attempt to define productivity, taking into account everyone's point of view. The concept of productivity has been conventionally represented by:

$$\text{PRODUCTIVITY} = \frac{\text{Real Value of Output}}{\text{Real Cost of Input}}$$

To minimize the possibility of misinterpretation, productivity indices should take into account the following considerations:

- How likely is the contingency which makes the output valuable? (e.g., contingency plans for military action.)

TABLE 1-1

PANEL 1: PRODUCTIVITY IMPROVEMENT

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TABLE 1-2

FACTORS IMPACTING PRODUCTIVITY

ITEM	CLASSIFICATION	DEGREE OF IMPORTANCE
Labor Mobility	Manpower Planning	High
Multiplicity of Policies	Standards & Measurement	High
In It Together	Recognition & Reward	Low
Management Involvement	Management Behavior	High
Skills	Training	High
Global Competition	Standards & Measurement	Low
Employment Security Perceptions	Communications	High
Expressed Appreciation for Job Done	Recognition & Reward	High
Group Effects (Synergy, Bonding)	Communications	Medium
R&D/GNP, Incentives	Recognition & Reward	Low
Capital/Worker	Management Behavior	High
Age Distribution of Workers	Manpower Planning	Low
Women Entering Workforce	Manpower Planning	Low
Experience	Manpower Planning	Low
Inter-industry Shifts	Communications	Medium
Incr. Government Regulations	Manpower Planning	Low
- Incr. Inputs w/o Incr. Outputs		
Adverse Social Trends (Crime, Drugs)	Manpower Planning	Low
Focus on Quality (Versus Numbers, Quantity)	Standards & Measurement	Low
Diverse Definitions of Productivity	Standards & Measurement	High
Incentives - Property Rights - Regulations - Friction of Shifts in Industry - Taxes	Recognition & Reward	Low
Input Costs (Oil) - Change in Capital Value	Manpower Planning	High
Short-Term Preoccupation	Standards & Measurement	High
Over-emphasis on Central Direction	Management Behavior	High
Decline of Accountability	Standards & Measurement	High
Need for Collective Incentives	Recognition & Reward	High
Doing Things Right (To Exclusion of Doing Right Thing)	Standards & Measurement	High
Feeling Good About Yourself (Doing a Good Job)	Recognition & Reward	High
Lateral (Vs. Vertical) Bonds in Organizations	Recognition & Reward	Medium

1-4

TABLE 1-3

CLASSIFICATIONS BY DEGREE OF IMPACT

DEGREE OF IMPACT	STANDARDS AND MEASURES	MANAGEMENT BEHAVIOR	MANPOWER PLANNING	TRAINING	COMMUNICATION	RECOGNITION AND REWARD
High	Change in input costs	Productivity a function of management of time & info Clear, hard goal setting leads to improved performance Capital vs manpower impact Reward system should be productivity contingent Acceptance of potentially good ideas even if they ultimately fail Many problems in productivity stem from management behavior Too many formal procedures, rules, regulations Decline of accountability Management involvement Increased government regulations Focus on quality vs quantity Over-emphasis on central direction Doing things right as opposed to doing the right thing Delegation of authority	Global competition Synergistic effect in groups Labor opposition Selection and placement devices	Skills Quality education	People want to be winners Workers not associated with goals, missions, and plans Success goals imbued by families	Expressed appreciation for job done R&D incentives Property rights Regulatory incentives Taxes Pay contingent on improved performance High marginal tax rate
Medium	How to measure costs and benefits Consistency vs average level of productivity Quality vs net income as an immediate goal Dependability vs productivity	Employment security perceptions Short-term preoccupation Lateral organization bonds "Watchdog" mentality Lack of competition in government contracting Need for confidence in leader's competence	Mobility of labor Age distribution of workers Women entering workforce Lack of experience Perceived insurity of employment	Respect for authority Manager's competence (technical and managerial) Relevant education Technical demands of job greater than technical education	Disassociation from end product Management/worker teamwork	Friction of shifts in industry Need for collective incentives Quality and comfort of workplace
Low	Evaluation of international corporations Cost/quality tradeoffs	Multiplicity of policies Efficiency vs entrepreneurs National productivity policy Management preoccupied with numbers of hours worked	Inter-industry shifts Adverse social trends Mismatch of availability of low-skill jobs with low-skill people			Pursuit of symbols of success rather than success itself What do we want to be versus what do we want to do

1-5

- Outputs have value only as they contribute to goal accomplishment.

- Productivity is closely related to several other concepts: value-added, effectiveness, efficiency, product quality, continuous improvement, organizational commitment to optimization, and conservation of input resources.

- Total cost of input may include unintended costs (e.g., environmental pollution, worker dissatisfaction, litigation, and costs to others).

- The value of output and the value of input must be measureable. For example, revenue per employee, combat casualty trade-off ratios for opposing forces, readiness status. Indicators of service inputs and outputs (e.g., research, management costs) must be included in the measurements.

- Measures of productivity are merely tools. Management's judgement in interpreting those measures determines their usefulness.

2. **ISSUE TITLE**: Organizing and Managing for Increased Productivity

   a. Discussion:

   There was general agreement that productivity can be improved by several types of management actions:

   - Define and communicate goals.

- Give feedback on goal accomplishment to all involved.

- Clearly demonstrate top management commitment to productivity.

- Create incentives for increased output value and decreased input cost (e.g., gainsharing).

- Select quality personnel (high ability, dependable).

- Manage (optimize) on a broad scale rather than case-by-case.

- Focus on quality; then reduce cost to beget productivity.

- Encourage team work.

- Use quality improvement process in place of productivity improvement for better acceptance by employees.

- Encourage employees to develop career goals.

- Reward problem prevention versus problem solution.

- Make the customer "real" for employees.

- Make individuals accountable for processes that must be coordinated across vertical chains of command.

- Eliminate centralized procedures where they are not needed (let dispersed units create local methods to contribute to centralized goals).

- Overcome labor fears of job loss due to increased productivity by guaranteeing that productivity improvements will not be used to lay off workers ("productivity/job insurance").

- Initiate organizational structure changes to enhance productivity.

- Support R&D to enhance future productivity.

In addition to discussion of these specific management actions, some questions were raised for further study:

- What is the relationship of productivity-enhancing capital investment and productivity-enhancing personnel initiatives?

- How should the benefits of an industrial learning curve be shared among an organization, its employees, and its customer to best enhance productivity?

- What is the role of competition in encouraging productivity improvement?

- How does one achieve greater competition in the supply of public goods and services, such as national defense?

- Productivity is more difficult to measure than performance; when is it sufficient to measure output or performance (increased productivity can be viewed by labor as a threat to jobs, improved performance is not usually viewed as threatening)?

- Does improved productivity create or destroy jobs?

- How can productivity create jobs in the long run?

- Is it appropriate to view productivity as a top-management purview, while quality and performance are more appropriate considerations for other (lower level) employees?

- How do we foster both innovative/creative leaders (concerned with doing the right things) as well as traditional leaders (concerned with doing things right)?

- How can we detect and reward managers who prevent problems (versus those who merely solve problems)?

- Is it true that the planning horizon of management should move out as management level increases?

- Is quality properly defined as meeting customers' <u>needs</u>, or as meeting customers' <u>expectations</u>?

1-9

b.   Recommendations:

- An organization should have valid, objective measurement tech-
niques to ensure selection and placement of the best managers and
other personnel. This may mean job performance evaluation prior
to employment or enlistment.

- In addition to being selective at the front end, an organization
should strive to retain quality personnel in the system.

- "Productivity/job insurance" is a must. That is, there should be
a system in place for retraining and job placement of workers
displaced by productivity improvement.

- The best way to obtain productivity improvement is by placing the
emphasis on quality -- both of the people and of the product.
This avoids a negative feeling and "work harder" impression that
most people have about productivity.

- Recognition or "positive-stroking" is essential. It can be
financial or it can take other forms. Effectiveness of cash
incentives varies by the individual (and his financial status).

- The private sector should explore the possibility of using the
military technique of rotating entire interactive teams rather
than individuals.

- Management must do a better job of informing people about how they fit into the whole organization and mission.

- Quality and productivity should be visually supported by top management, both in the military and corporate America. There should be high level, competent personnel reporting directly to top management, who serve as the focal point for quality and productivity improvement.

- Productivity cannot be improved without the total commitment of top-level management. Productivity improvement starts at the top but is implemented by middle and first-level management.

- Government and many industries should explore the concept of making a single manager responsible for the whole product or process. Reduce sub-optimization.

- Units must provide customer feedback to the workers. Give workers a sense of mission, and progress toward mission accomplishment.

- Gainsharing among the organization and its employees has important potential for productivity improvement.

- Management must utilize both individual and team involvement methods to align employee goals with organization goals.

- Managers need to be leaders of people in addition to being managers of functions.

- Productivity improvement must be focused on the total system or process, not just the employee.

- Education of the work force is a key to long-lasting improvement.

- There should be a direct impact on the top management salary and bonus structure for changes in quality, productivity, and market share. Part of this should be set aside pending the long term impact of those top management actions. Less attention should be paid to quarterly bottom-line and more incentive provided to direct and achieve long-range growth and profitability.

- Individual compensation should be contingent upon individual contributions to productivity and quality.

- Decentralization is a desirable trend. Accountability and authority must be clearly delgated to the lowest possible level by those who are ultimately responsible. An organization should seek to maximize the decentralization of authority and control in order to improve productivity, being careful that sub-optimization does not occur.

- Periodic review of procedures and regulations (for updating and elimination, where possible) is essential for sustained productivity improvement in large bureaucratic organizations.

- Communication barriers between organizational groups (e.g., management, union, shareholders) inhibit productivity.

- Long-range (10 to 20 years) goals to meet quality and productivity objectives need to be established by all organizations and communicated to the employees. The employees, supervisors, and middle management should develop annual tactics and strategies to progress toward the long-range goals and communicate these to upper management for their concurrence.

- There is a need to keep all three partners (stockholders, management, and employees) informed and involved. This means that the employees as well as the stockholders should be provided with quarterly business reviews that are pertinent to their interest.

3. **ISSUE TITLE:** Productivity Implications of Automation and Its Effect on Middle Management and Staff

a. Discussion:

Automation in this context includes office automation equipment, computer networking, digital data bases, software, artificial intelligence, and

robotics. The Panel agreed that automation is inevitable, necessary and, for the most part, positive and productive. Several factors affect the success of introduction of this new technology, and its effect on management staff.

Education of the workers is essential. This includes technical training on the new equipment and, just as importantly, informing the workers of: the benefits to be derived; how the mission will be better served using the new equipment; and what their new role will be in executing that mission. The military services excel in their approach to training. Industry and Federal civilian training activities can learn from the military technical training experience. It should not be expected that American educational institutions will accomplish the entire task of preparing workers to use automation. Those institutions provide general education; job-specific training must occur in the applicable environment.

Government personnel are especially in need of education for automation. Such education is needed to operate government equipment, and to deal competently with government contractors.

Middle management is the most likely management level to be dramatically changed by automation, and thus may see it as a negative thing. As automation increases, there will still be a need for upper level managers and for production workers to oversee the equipment, program the machines, and load data. Middle managers may feel threatened by being put "out of the loop". The middle layers of management could be reduced by automation because their information transmission function is being made obsolete. At the same time the span of control for each manager will probably become smaller, rather than larger, because each worker is capable of greater productivity in terms of

- Computer applications should be taught in every grade school and junior high school as a mandatory course.

- Development design activities need to insure "manufacturability", and that the new products are amenable to automated processes.

- Top management must relinquish some of their present operating controls to middle management, so that their major activity may be directed at long-range planning.

- More research and development money needs to be invested in process development, and less in basic concept development.

- Units must consider more than office automation. The whole concept of digital data, software, networking of machines and information security deserves attention.

- Units should explore AI (e.g., expert systems) to increase productivity; however, operational experts must be directly involved in building of expert systems. System development must not be left exclusively to software programmers.

- Automation should serve to drive decision-making to the lowest level possible, thus reducing management layering.

- Government should encourage internal competition to generate productivity improvements through automation.

information output and control. Of course, what actually happens to the span of control depends on the complexity of the jobs performed by those workers. The span of control could be reduced or increased, depending on the diversity of the jobs performed by subordinates and the amount of integration to be done by the manager. For example, a manager of word processor operators may be able to control 15-20 people while a computer programming office manager may only supervise 10-12.

If productivity is to increase through automation, tasks and decision-making must be executed at the lowest level possible. Unfortunately, in both government and industry, middle managers sometimes hesitate to delegate tasks because: 1) they used to be technicians and, therefore, feel comfortable continuing to do their former tasks; and, 2) they want the credit for the job done.

Private industry has been much more eager to incorporate automation than has the government. This is primarily due to the competition in the private sector. The Defense Department and government agencies in general could benefit by promoting more internal competition and a greater striving for excellence through automation.

b. Recommendations:

- Those responsible for productivity improvement must plan for continuing education of people and for new roles for each person at the time of productivity improvement action, not after implementation of automation.

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- Robotics applications should be developed wherever possible to replace people in functions that are dangerous or tedious, or in other types of functions in which machines are more productive.

- Robotics applications should be used to economize on manpower by capitalizing on the capability of robotics to allow one person controlling several robots to perform the functions of several people.

- Automation plans should be premised upon long-range goals, the present situation, and perceived obstacles in moving from the present posture to achievement of the ultimate goals.

4. **ISSUE TITLE**: Organizational Strategies for Management Change and Obsolescence

    a. Available time precluded discussion of this issue in reasonable depth.

    b. Recommendations:

    That this issue be the subject of continued research and dialogue among Panel members.

5. **PANEL CONCLUSIONS**:

    a. The Panel felt that productivity and quality improvement was the central issue of the Forum. It is the bottom line of all other Panels. If productivity of the nation and the quality of its products (including military
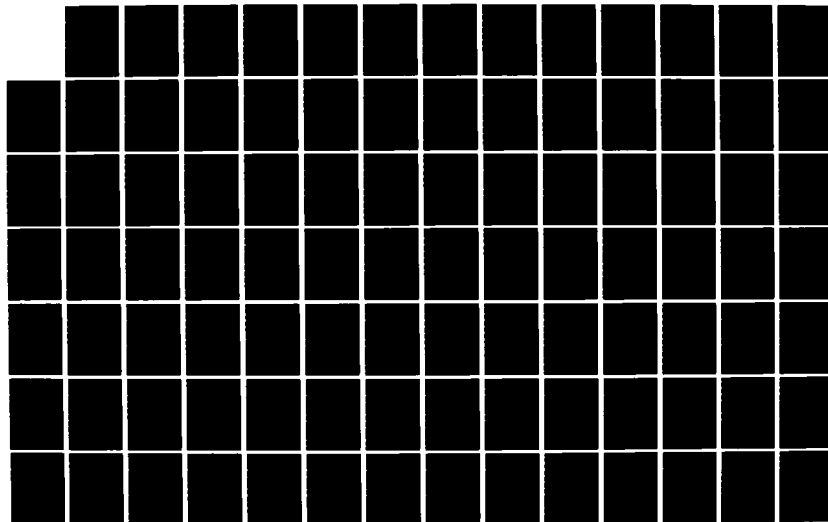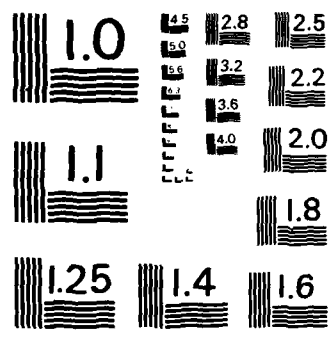
MICROCOPY RESOLUTION TEST CHART

NATIONAL BUREAU OF STANDARDS - 1963 - A

readiness) decrease, the strength of the nation is compromised. America has not been keeping pace with overseas competition in many areas affecting productivity and this adverse trend must be turned around if we are to continue as an industrial and military power. While the private sector has an entrepreneurial mindset which leads to enhanced productivity, it must be remembered that corporate goals may be formulated with no commitment to national interests, since many corporations are not national but international manufacturing, purchasing and sales organizations.

b.   While the Department of Defense has been at the forefront in long-range planning and goal identification, short-range accomplishments all too often receive the bulk of the recognition in both the public and private sectors. The Panel concludes that these problems are ultimately the responsibility of the leaders not the lower-level workers. Management controls procedures, technology, new materials, employees and other factors while also having responsibility for the long-range goals and national interests.

c.   Upper management must communicate goals to subordinates and make the organization's goals important to them as well. To gain and maintain the respect of their subordinates, middle managers must display task-related competence, consideration, and enthusiasm for organizational goals. Workers are becoming better educated technically, but they must know how their jobs fit into the big picture. The mission must be known by all. Management must convey missions, principles, and goals so that people will be excited and personally committed to improved productivity in their jobs. Research indicates that informed workers (those who know how their jobs fit into the big picture) are more productive.

d.   The Panel felt that there was inadequate time to do a comprehensive analysis of national productivity improvement. As a result, only cursory consideration could be given to major issues.

e.   To summarize, productivity is the name of the game in business and defense. Productivity goes directly to the bottom line, whether that line is corporate net profit or military readiness and sustainability.

GENERAL RECOMMENDATIONS FOR PRODUCTIVITY IMPROVEMENT

*   The Panel recommends an effort to raise governm ̄t and industry awareness of the meaning, causes, and importance of productivity and quality. An annual award for managerial excellence like the Demming Award in Japan or the Annual Secretary of Defense Productivity Award, could serve to high-light productivity and quality.

*   The Panel recommends continuing, regular, industry-defense dialogue using vehicles such as this National Forum on Human Resource Planning.

*   The Panel recommends that Panel 1 continue in existence with its current members and with the addition of representatives of organized labor and Congressional staffs.

*   A clearinghouse of productivity information is needed to enhance the effectiveness of the many productivity advocates.

- A special program to inform the members of the United States Congress, as well as their aides, about the quality and productivity dilemma, should be arranged for October to coincide with National Quality Month.

- A Presidential Commission for quality and productivity made up of representatives from all the organizations involved in solving America's productivity and quality problem should be established to improve communications between groups, exchange ideas, and reduce redundancies.

- A national qualilty index should be developed.

- Subjects related to quality and productivity should be made mandatory in business school.

PANEL 1 - PRODUCTIVITY IMPROVEMENT

ISSUE A - ORGANIZING AND MANAGING FOR INCREASED PRODUCTIVITY

Statement of the Issue: What organizational and management techniques can be employed to boost worker productivity? What can US companies learn from the successes and failures of European and Japanese productivity enhancement initiatives through management innovation? How does rapidly evolving technological change affect human behavior in the workplace?

Background:

A. General: Overall US productivity has been increasing, but at a decreasing rate, while costs per unit of output have gone up steadily. This competitive disadvantage demands more efficient organization and improved management technique that will increase productivity and decrease costs. A new staff function is clearly emerging -- productivity management -- which can be approached in several ways. At the lowest levels, quality circles and efficiency monitoring teams can be established, or in a broader context an organizational emphasis upon job enrichment can be implemented as a primary productivity enhancement initiative. Ideas for managing and implementing productivity enhancement can also be encouraged at the individual level through the use of worker and staff incentives. By 1980, there were approximately 40 productivity and innovation centers in the United States according to the US Chamber of Commerce, providing the business community with access to new sources of information and ideas on productivity improvement. While there is little agreement on the operational aspects of productivity management, there appears to be a high level of agreement on some fundamentals. Programs can: (a) focus directly on productivity improvement; (b) strengthen line responsibility for productivity; (c) obtain top management's commitment; (d) maintain a multidisciplinary approach; or (e) maintain open communication.

B. Defense Perspective: In 1975, the Department of Defense (DoD) formally established the Defense Productivity Program in order to bring productivity considerations into the mainstream of defense management. This is a synthesis of technological and quality-of-work-life factors that affect worker motivation. The current program is individually-based, decentralized, responding to productivity problems on a case-by-case basis. Workforce motivation within DoD includes a wide array of specific Service and agency-directed initiatives employing both behavioral science and management analysis techniques. Included under this umbrella are such diverse strategies as organizational effectiveness, job enrichment, quality circles, and productivity-based incentive pay systems. In its decentralized approach, the Army uses 350 captains and majors who have advanced degrees in behavioral science or management as full-time consultants. They are assigned in pairs to major units and installations where they apply

techniques such as team building, goal-setting and survey-guided development. Similarly, the Navy uses 300 uniformed personnel to collect and analyze organizational data; plan, develop and implement strategies for organizational change and improvement; and evaluate practices for contribution to mission readiness. Air Force uses a Leadership and Management Development Center for improving these skills. In 1977, DoD initiated a Productivity Enhancing Capital Investment (PECI) Program (including FASCAP -- Fast Payback Capital Investment Program; PIF -- Productivity Investment Fund; PEIF -- Productivity Enhancing Incentive Funds; and CSI -- Component Sponsored Investment) to complement existing programs for employing modern industrial and management engineering techniques to the Department's relatively new emphasis on work force motivation and efficiency reviews. These programs represent significant steps toward erecting an institutionalized means of dealing with both short-term and long-term capital and human problems impeding productivity improvement. By 1990, these funding strategies will have recorded savings of over $3 billion.

C. Industry Perspective: Whatever the operational strategy may be, any productivity enhancement program needs the commitment of top management, a promise that a program will be developed and implemented with enthusiasm at all levels. As discussed in the Defense Perspective, these initiatives involve a simultaneous treatment of socio-technical and quality-of-work-life issues. Assuming proper identification of productivity problems and development of suitable enhancement strategies, industry implementations of improved management and organizational techniques may include:

- Improvement of job descriptions. Technology and office automation can free workers from some of the more tedious tasks. New jobs may be designed to meet both technological imperatives as well as worker demands for more interesting, diverse and satisfying work.

- Examination to determine the best organizational positioning of productivity management and watchdog functions. Individual, group, managerial or separate departmental levels can be established.

- Development within the productivity enhancement program of strategies focused upon individual company capital or labor emphasis. Careful human resource planning can avert potentially tricky labor relations issues arising from introduction of labor-saving devices or techniques.

- Development within any productivity scheme of a workable line or matrix of authority/responsibility, taking careful account of its human costs (psychological and organizational).

Future Concerns: An array of issues need to be considered:

- The proliferation of inexpensive and portable microcomputers raises numerous questions that apply directly to middle management. Fewer middle managers may be required on the job site to perform tradi-

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tional information services. Computer portability could similarly change support personnel requirements (fewer key-punch operators, programmers, word processors, etc.).

- Labor unions will be interested in any proposals that might be construed to endanger job security.

- Work in productivity enhancement will continue to provide a means of realizing short-term gains from existing resources. Continued, long-term commitment will be a requisite for the entire business community if it is to remain internationally competitive.

Desired Outcomes:

- To support a motivational program, a system of rewards might be developed to recognize productive innovations and compensate/reward responsible personnel.

- Company productivity enhancement programs rely on the commitment of top management to the program. Top management needs to define and conspicuously support a visible symbol of the program.

- Acquisition structures and strategies must be refined to allow the organization to respond quickly to productivity-enhancing capital and labor realignment opportunities.

- Education and awareness of program goals must penetrate the entire organization to be effective. Only then do the proper mechanisms acquire real meaning and the capability to reach their full potential.

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PANEL 1 — PRODUCTIVITY IMPROVEMENT

ISSUE B — IMPLICATION OF ROBOTICS AND OFFICE AUTOMATION

Statement of the Issue: Both robotics and office automation imply instant enhancement of productivity and work life, but are they really the futurist panaceas they seem to be? How is the human factor affected? What are the not-so-obvious cost issues?

Background:

A. General: No factory of the future will be able to exist in an internationally competitive world without robotics. The modern office will be automated to keep pace with faster communications and assure high quality at greatly increased volume. To manage the transition to automation and robotics, an appreciation of the human issues is required. In the case of robotics, human adversity is not uncommon when industry seeks to apply a purely technological solution without full assessment/integration of the human factors. It is necessary to address the myth that robotics simply displaces workers. Office automation choices must first address the needs and capabilities of users to assure increased productivity at levels warranting the equipment investment cost.

B. Defense Perspective: Industrial automation, related manufacturing technologies, and office automation are critical components for enhancing readiness and lowering costs in a Department of Defense (DoD) that employs almost one million civil service personnel. The steps now being taken toward massive technological upgrading of the defense combat support establishment (depots, overhaul, maintenance, and logistics facilities) are long overdue. Productivity capital investment funds and productivity-enhancing incentive funds have reached over $200 million annually, but that represents less than half of the solution. Socio-technical systems theory holds that changes must be complementary in terms of both technology and personnel. Consequently, these expensive capital investments will not return maximum gains if employees who operate and maintain the equipment are improperly selected, trained, compensated, motivated, evaluated, and given direction. Personnel management practices must be adjusted for new technological requirements. Private industry has advocated a team approach for identifying problems, communicating, and implementing solutions. Within such co-determinational units, dealing with the new kinds of jobs automation will bring becomes easier, and both managers and workers then acquire a stake in the outcome. The rigidity of federal job classifications systems, however, may present a particular impediment to decentralized, case-by-case labor innovation. Closer links must be maintained between operating units and training units to accommodate the continued shift toward more sophisticated technical skills.

C. Industry Perspective: As in Defense, private sector restructuring and retraining accompanies the introduction of labor-saving automation in the modernization process. Private sector flexibility in matters of labor force modification has stimulated application of socio-technical design concepts and methods. Heterogeneous design teams have been put to work to study, for example, gender and status issues arising from predominance of women in data processing and clerical fields. The teams are well-equipped to apply acceptable solutions to automation problems. Cost-benefit analyses are particularly important in the initial stage. The economic motivations for automating an office or factory are generally very convincing, however, many firms are slow to move on this front. Unless their competition employs robotics or uses office automation, they are not inclined to move into areas that are relatively unknown. Retooling of plant, retraining of workers, and restructuring of organizations are required, sometimes at too great a cost -- human or economic. Introduction of a new technology into the workplace is met with both enthusiasm and suspicion; the former because top management seeks higher output per unit of labor and workers are relieved from tedious or hazardous tasks; the latter because those same workers fear loss of their jobs. Worker displacement is the highest concern of labor unions, and as industry struggles to get through the transitional phase -- programming robots and computers to meet specific applications, changing factory or office layouts and environment, and retraining workers to become supervisors of robots -- unions are offering initial resistance, at least until their concerns are addressed.

To set an appropriate course answering the call of competition, major change is needed, and the first area that impacts both operational and human goals is education. Workers need to acquire the higher skills that are essential to their continued employability, but because American society is so much more mobile than the Japanese, for example, companies are hesitant to offer retraining at work since a worker can easily leave for a competitor after acquiring new skills. Furthermore, the study of human issues and the implications of robotization and office automation are still in a nascent stage.

However, the private sector's relative flexibility in matters of labor force modification has contributed to the application of socio-technical design concepts and methods. Found to be useful in supporting the success of technological improvement are management techniques which provide various levels of staff and management input in making application decisions. It is expected that workers will respond better if they contribute to the decision-making process, thus acquiring a stake in its outcome. Other human issues ranging from ergonomics to technical choices are in some cases being approached by the heterogeneous design teams referenced above. Such efforts are recognized by most businesses as essential to closing technology gaps such as the one with Japan -- 20,000 programable robots in Japan compared to 8,000 for the US.

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<u>Future Concerns</u>: An array of issues need to be considered:

- It becomes more and more important in this changing economy to break out of the traditional opposing labor-management roles. An entirely adversarial relationship is not in the best interest of either party, since the future of the entire country depends on forward technological movement.

- The office of the future may be totally unrecognizable in our current terms of reference. Who must take on the task of retraining and redirecting? Entry-level labor surplus exists (a relatively untrained body) but the skilled people with high-technology and computer backgrounds remain in relatively short supply.

- Government, labor unions and corporations must act in concert to keep pace with international competition and plan for smooth transition in areas of rapid technological change. Can or should government take the lead in streamlining and automating its offices to the state-of-the-art? Can government serve as the clearing house for technical planning information?

- Should government offer increased support to specifically targeted industries? Should the capital investment demands in industry be better recognized in the form of a time-valued, depreciated capital payback system?

<u>Desired Outcomes</u>:

- The effectiveness and applicability of socio-technical methods varies from industry to industry. Studies must be undertaken to generate a comprehensive pool of information which can be exploited by innovative industries and government offices.

- In recognition of the changing complexion of the US economy (from manufacturing to services and from smokestack to high-tech industries), a concerted effort must be made to sustain advanced technical training in schools and through adult education programs in the public and private sectors. Education fosters an understanding of the future; unhindered by ignorance, the application of technology is completed with greater speed and efficiency.

- Professionals should not spend, as they do, most of their time performing routine clerical tasks associated with information handling. Proper analysis and categorization of how time is spent will greatly assist in accurately targeting high payback points for automation. The resulting diversification of work will enhance the quality of life in the workplace.

- Human resource professionals must participate now in a team approach (operators, managers, R&D innovators) to address the demands of the highly automated workplace of the future.

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PANEL 1 - PRODUCTIVITY IMPROVEMENT

ISSUE C - DOWNSIZING MIDDLE MANAGEMENT AND STAFF

Statement of the Issue: It has been said that -- particularly in large organi-
zations -- there are too many middle managers. Given increased access to
"operational" information through automation, should a downsizing of mid-
management staff be effected? Can the span-of-control of the average manager be
expanded without hurting management efficiency and productivity?

Background:

A.   General: Two quite independent issues -- seeking a leaner, more
      efficient management staff -- and the changing management staff roles
      induced by office automation -- are complementary challenges as
      senior executives pursue excellence and productivity enhancement
      objectives within their middle management staffs. The new office
      technology not only frees staffers from many tedious tasks, it poses
      new problems for managers who must adapt their management routines to
      fully exploit the capabilities of emerging automated management/office
      technology.   Retraining staffers and redesigning their jobs poses
      many logistic and human problems. Costs must be thoroughly considered
      and many hours of planning time need to be devoted to the equitable
      and efficient reallocation of material and human resources under these
      new circumstances.

B.   Defense Perspective. In a large organization such as the Department
      of Defense (DoD), the reduction of unnecessary "layers" of management
      has been a long-standing objective. More recently, Congress has
      mandated reductions in the size of headquarters staffs. Personnel in
      middle management positions were sharply reduced at both Washington
      and Field command levels in the several Military Departments through
      the first half of the 1970s. The drive to achieve greater operational
      economies continued into the 1980s with the outright elimination of
      positions, reduction of redundant common functions and realignment of
      other functions. Similar patterns apply to each of the Services, the
      Office of the Secretary of Defense, the Joint Chiefs of Staff, and the
      Defense Agencies. As the cost of manpower continues to consume in the
      range of one-half of the Defense budget, the pressure for lean middle
      management staffing is expected to continue -- particularly in the
      near term as the Armed Forces seek increases in their aggregate
      manpower levels for the purpose of enhancing readiness and combat
      capability in the field.

C.   Industry Perspective: A burgeoning corporate bureaucracy can
      adversely affect management efficiency and productivity. The
      symptoms of organizational ineffectiveness that result from an
      excessive bureaucratic "overhead" have been identified to include

narrow spans of control, redundant management levels ("layering"), fragmented jobs, too many committees, executives wasting time on low-level tasks, and duplication of effort. The most apparent and simplistic of the solutions -- non-workload-related cuts across the board -- can be deceptively simple and minimally productive. A practical solution requires determination of essential management-to-worker ratios, and must involve, among other things, consideration of task complexity, levels of coordination required (among people and units), similarity among activities, and the number of different activities within a unit. In human terms, job redesign and organizational change may place too much stress on selected key individuals. Displacement of other staffers can involve retraining, relocation, or termination -- each of which is not without its cost. To the extent that they are involved, labor unions can insist on job security and strict adherence to existing contracts. Staff reductions must also take careful account of the cost of turbulence, and the value of stable communication and coordination within the management staff as key determinants of efficiency in the decision-making process.

Future Concerns: An array of issues need to be considered:

• As the technology of office automation continues to emerge, unique measures may be needed in establishing proper middle management staff ratios. How can these requirements be effectively defined?

• Are manpower modeling and computer simulation techniques useful in determining levels of management efficiency?

• The decentralization of computer power through the widespread use of relatively cheap standalone and multi-user microcomputers is re-defining the roles of functional managers as well as information resource managers. How will this evolution affect the capacity requirements of the technical architectures developed to support new automated information flows? Will middle management positions be transformed into technical support positions requiring greater literacy in the newer information technologies?

• What factors are involved in determining the point of diminishing returns in management staff downsizing? What is the point at which these measures become a "diseconomy"?

Desired Outcomes:

• As introduction of office automation proceeds, it will become more and more important to reassess staff and management roles through such vehicles as external audits and self-reported assessments.

• If reduced middle management staffing is feasible within the organization, it can also enhance communications and the quality of life in the workplace, at least theoretically, by reducing the layers between workers and decision-makers, and increasing the visibility and accessibility of top management.

• Industry case studies may provide a good measure of initial guidance for organizations seeking to make mid-management staff adjustments.

- Management staff ratios can possibly be modeled after those arrived at through statistical analysis of like private or government sector organizations.

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PANEL 1 - PRODUCTIVITY IMPROVEMENT

ISSUE D - ORGANIZATIONAL STRATEGIES FOR MANAGEMENT CHANGE AND OBSOLESCENCE

Statement of the Issue: What organizational strategies and institutional mechanisms need to be developed to deal with management changes emerging from productivity enhancement initiatives? What organizational and management strategies can be employed to assist in both avoiding obsolescence and coping with the turbulence of change in an era of rapidly advancing technology?

Background:

A. General: Uncoordinated emphasis on productivity enhancement can result in numerous disparate initiatives which may require integration into a larger planning scheme if they are to remain cogent and responsive in an environment of rapid change. Productivity initiatives and quality improvements can either be of a programmatic, short-term nature, or employ a long-term strategic approach. A logical evolution from programmatic to strategic approaches is implied as the impacts of such technologies as office automation become more evident. However, there are extenuating circumstances and costs which must be considered with the adoption of either approach. Similar considerations apply in successfully coping with the turbulence of rapid-fire technological change.

B. Defense Perspective: The Defense Department has been implementing several new institutional mechanisms (such as the Fast Payback Capital Investment Program) which facilitate management's capacity to implement essential capital-for-labor innovations or technology substitutions. In 1975, the Department of Defense (DoD) formally established the Defense Productivity Program in order to bring productivity considerations into the mainstream of defense management. This is a synthesis of technological and quality-of-work-life factors that affect worker motivation. The current program is individually-based, decentralized, responding to productivity problems on a case-by-case basis. Workforce motivation within DoD includes a wide array of specific Service and agency-directed initiatives employing both behavioral science and management analysis techniques. Included under this umbrella are such diverse strategies as organizational effectiveness, job enrichment, quality circles, and productivity-based incentive pay systems. In its decentralized approach, the Army uses 350 captains and majors who have advanced degrees in behavioral science or management as full-time consultants. They are assigned in pairs to major units and installations where they apply techniques such as team building, goal-setting and survey-guided development. Similarly, the Navy uses 300 uniformed personnel to collect and analyze organizational data; develop, plan and implement strategies for organizational improvement and change; and evaluate practices for contribution to mission readiness. Air Force uses a leadership and

management development center for improving these skills. In 1977, DoD initiated a Productivity Enhancing Capital Investment (PECI) Program (including FASCAP -- Fast Payback Capital Investment Program; PIF -- Productivity Investment Fund; PEIF -- Productivity Enhancing Incentive Fund; and CSI -- Component Sponsored Investment) to complement existing programs for employing modern industrial and management engineering techniques to the Department's relatively new emphasis on workforce motivation and efficiency reviews. These programs represent significant steps toward erecting an institutionalized means of dealing with both short-term and long-term capital and human problems impeding productivity improvement. By 1990, these funding strategies will have recorded savings of over $3 billion.

C. Industry Perspective: Some companies are designating productivity managers to establish, implement and supervise these programs. They have focused on both long-term and programmatic planning under a traditional organizational scheme, arranged by function. Advantages as well as drawbacks arise under such an arrangement. Productivity managers, just as other functional specialists, behave as such and tend to develop parochial attitudes in decision-making. In matrix organization, where there is both a functional and a project manager operating in any one area or for one task, a similar problem of duplicative management arises. Authority split between managers may cause confusion of priorities for personnel resulting in a net productivity decline. Since productivity management can take place at every level from individual to company or even industry-wide, it appears that a multilevel, multidimensional productivity approach is gaining currency in industry. Institutional mechanisms are being built to accept inputs on productivity matters, act as a clearing house, devise strategy and supervise implementation of all productivity programs. The productivity functions that are being incorporated in these industries by their nature are accommodative and flexible. They are based on a dynamic view of management. As productivity management and socio-technical studies move into standard corporate parlance, more and more case studies will have been developed to guide industry with models and results of pilot programs.

Future Concerns: An array of issues need to be considered:

- What further changes in organizational structure and management strategy will be required as a result of further quantum technological advances? How do present management systems and organizational structures behave when substantively modified to accommodate change?

- Are integrated strategies -- ones which employ both programmatic and strategic productivity management -- most useful, or is there an implicit duplication of functions?

- How should research be conducted to determine the most efficient approach to productivity management, and identify points of diminishing returns. What will be the long-term response at the individual level to productivity watchdogs? Where should an organization draw the line between organizational oversight and self-initiated participation?

- Are there privacy issues involved? What are the human costs of monitoring techniques? Can these factors be integrated or institutionalized in the productivity management system?

<u>Desired Outcomes</u>:

- Functional reviews can become a useful tool in discovering staff disaffection and managerial waste. Survey tools and analytical methods need to be developed to efficiently handle such reviews.

- Productivity enhancement requires a quick and responsive organization. Valuable time and money can be lost while productivity management innovations are mulled over by layers of bureaucracy.

- Careful consideration should be given to productivity "departments". Such organizational measures can be initiated as much for appearance as for substance. Making sure productivity management actually needs separate emphasis -- enough to justify an entirely separate function -- will need to be addressed as part of the organization-wide productivity strategy.

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APPENDIX 2

PANEL 2 REPORT: HIGH TECHNOLOGY — MEETING THE EMPLOYMENT NEEDS

NATIONAL FORUM ON HUMAN RESOURCE PLANNING

FOR PRIVATE SECTOR AND DEFENSE LEADERS

PANEL 2 REPORT

HIGH TECHNOLOGY - MEETING THE EMPLOYMENT NEEDS

1.   INTRODUCTION

Panel 2 was chaired by Dr. Arnold F. Kanarick, with Dr. W.S. Sellman serving as assistant chair. Table 2-1 lists all Panel members as well as recorders and observers, together with their respective primary private or public sector affiliation.

At the suggestion of the Panel chair, Panel members provided an introductory summary of their backgrounds and then identified the major issues and/or concerns their organizations would face that directly related to the Panel theme. This initial review identified the following areas of concern:

- Ability of private industry, DoD, and academia to procure and/or enhance its technical talent to meet future manpower requirements.

- Procuring high quality enlisted personnel to meet high-tech military requirements.

- Designing weapons systems and improving the human-to-machine interface to meet the anticipated ability/aptitude levels available in the future recruiting market.

2-2

TABLE 2-1

PANEL 2: HIGH TECHNOLOGY - MEETING THE EMPLOYMENT NEEDS

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- Upgrading manufacturing management with technically oriented people.

- Improving forecasts of future human resource requirements.

- Utilizing current and future human resources technology and databases to forecast, strategize and target resources to meet organizational requirements.

- Improving procurement classification and utilization of people with lower ability levels.

- Meeting the needs of workers.

- Improving the corporate image.

- Upgrading the quality and resources of the American education system.

- Improving each sector's ability to determine future requirements and the aptitude mix necessary to achieve future corporate and governmental objectives.

- Determining the appropriate tradeoff between quality requirements, quantity limitations and resources (people and dollars) to meet forecast needs.

Recognizing that time constraints precluded a comprehensive/efficient review of each individual issue, Panel members agreed to limit the number of

issues and time frame to be considered. Further discussion focused on three major areas that encompass several individual concerns. These were limited to a near-term assessment of five years into the future. Panel deliberations covering these areas are the foundation for the remainder of this report.

2. **ISSUE TITLE**: High-Tech Manpower Requirements Determination (projecting requirements by type and obtaining adequate resources)

    a. Discussion:

    The Panel anticipates that difficulty in projecting and meeting future requirements will be concentrated in the enlisted force (blue collar) for the military services and professional workforce (white collar) for private industry. Since enlisted recruits are generally unskilled personnel with no prior work experience, the requirement to accurately measure individual aptitude requirements and education levels prior to entry was stressed. In addition, emphasis was placed on consideration of manpower, personnel, and training limitations in the weapons systems design and acquisition processes. Resource limitations and possible tradeoffs relative to the ability to recruit high quality, better educated people were discussed in light of budgetary restrictions and potential impacts of various quality mixes on national defense, readiness and productivity. For industry, it was recognized that high-tech professional workers are already skilled, with most having some prior work experience; major problems for the private sector are to identify the target market and then attract personnel to meet the needs of individual companies.

    It was noted that the military services and industry have common problems such as: shifting demographics changing the nature of the workforce (e.g.,

impact of women and aliens, population movement to the south and west); need to recruit people with proper educational backgrounds; and the increasing number of dual career families. Finally, it was recognized that high technology not only generates new requirements, but that there are also cases where technology can be the beginning of the solution or even the solution itself (e.g., job performance aids, training technology). With the increasing levels of high-tech requirements in both sectors, some common problems were identified for future study.

b.   Recommendations:

Improve manpower requirements forecasting using mutually supportive and complementary techniques.

- Use current technology and databases to forecast, strategize and target resources to meet manpower requirements.

- Improve the ability to determine future quantity and quality requirements and the aptitude mix necessary to achieve future objectives in each sector.

- Improve the human-machine interface by designing and acquiring weapons systems and equipment that are consistent with the anticipated ability/aptitude levels of the future recruiting market.

- Explore the development of work and training aids that enable personnel of average or less-than-average ability to perform above-average work.

Once manpower requirements have been determined, it is incumbent upon industry, government and academia to develop and implement strategies to procure people.

3. **ISSUE TITLE**: Creating/Enhancing Human Resource Supply and Talent in the Future Labor Market

a. Discussion:

Private industry, DOD, and academia must enlarge the supply of, and/or enhance technical talent to meet future human resource requirements. DoD requires high quality enlisted personnel to meet high-tech military require- ments. Private industry needs to upgrade manufacturing management with technically oriented people to meet future high-tech requirements. Both sectors recognize the need to improve utilization of people with lower ability levels.

The Panel realized the creation of sources of supply and talent can be accomplished in several ways. In terms of the changing demographics of the workforce, there are multiple sources of personnel that could mitigate the impact of the declining youth market. Included in the Panel's consideration were the following sources: women; older workers; minorities; handicapped workers; and immigrants. In addition, it was noted that improving the quality of America's education affords another powerful alternative to enhance the recruitment and utilization of high-tech people. Both sectors already have

personnel experienced in applying training technology and employing training equipment which could improve the education process. Finally, the Panel mentioned that both sectors must conduct a periodic review of entry level requirements versus known or forecast skill requirements.

b. Recommendations:

- Use of grants and scholarships; innovative educational approaches (e.g., "magnet schools; loaned officers, executives and professors); enhanced student/teacher motivation; "adopt-a-school" programs; and funded teacher retraining to emphasize a renewed national commitment to excellence in America's school systems.

- Explore the possibility of redesigning jobs and retraining present employees by re-evaluating and re-inventorying skill and physical examination requirements.

4. ISSUE TITLE: Management Environment

a. Discussion:

The emerging high-tech workforce, which in general has achieved higher levels of education than its predecessors, desires increased participation in decisions concerning its employment. In addition, its members have exhibited a strong desire to be treated as individuals. This could require constantly evolving and changing personnel strategies. While it was noted that the

military mission encourages uniformity, industry stresses individuality and innovation. The encouragement of uniformity does not necessarily mean that creativity must be stifled or limited.

b. <u>Recommendations</u>:

Explore strategies to: enhance worker satisfaction through improved utilization policies; emphasize cohesion and team spirit; increase the use of flexible compensation and benefits packages; increase internal recognition and reward programs; emphasize the value of a strong corporate or military identity; meet changing family needs.

5. **PANEL CONCLUSIONS**: (Continued Dialogue)

The Panel commends the National Forum process of bringing leaders from industry, academia and government together and recommends an annual agenda be formalized. Semi-annual, interim Panel meetings, with rotating hosts, should be encouraged to continue and expand these initial discussions. A broader constituency, i.e., from manufacturing and retail industries, academia, labor and government (both the Legislative and Executive Branches) should be considered for inclusion at future forums. The Panel Chair, Dr. Kanarick, of Honeywell, invited site visits by his Panel members to his organization's manpower management staffs and facilities for briefings and further information exchanges.

PANEL 2 - HIGH TECHNOLOGY -- MEETING THE EMPLOYMENT NEEDS

ISSUE A - DEMOGRAPHICS OF THE WORKFORCE

Statement of the Issue: Over the next 11 years the population of working people 18 to 23 years old will steadily decrease and the national workforce will continue to age. There will also be significant geographic movement and an increasing inflow of immigrants. How should these factors concern human resource planners? Will the future workforce be of sufficient size and have the technical qualifications desired by employers?

Background:

A. General: By the end of 1985 there will be approximately 4.3 million 22 year olds in the workforce, many of whom will be employed in entry-level positions, serving in the military or attending school. This figure will decline by 1.1 million by the end of 1996. These younger people who are in the workforce for the first time could become a scarce resource. To further compound the potential shortage, employers will be seeking increased numbers of those most qualified, particularly in the sciences and those with advanced technical training, to fill the available positions. With rapid technological advances anticipated in both industry and Defense, the demand for technically qualified personnel will probably rise. But even this expectation may not become a problem as schools teach students new skills and designers of hardware and software continue to make successive generations of computer products more user-friendly -- thus possibly not requiring as dramatic an increase in technical expertise as originally expected.

B. Defense Perspective: Advanced technology will continue to play a very important role in the military. The Navy, for instance, plans to expand the fleet to 600 ships encompassing 15 battle groups. In order to meet this demand, the number of technical jobs will increase by more than 31 percent. The increase in technical jobs will hold true for other Services. For example, the Air Force estimates that their need for people with high electronic aptitudes will increase about one third by the year 2000. The Army is concerned that high technology weapons systems may advance so far as to outstrip the abilities of its future manpower. In order to help meet future manpower requirements, many possible programs are being considered. These include: using more recruiters; increasing pay rates relative to industry; and offering improved total benefits programs. Compounding the decline in the pool of qualified youth, it is also possible that a higher quality recruit will be needed to carry out the national defense mission. As a result, it is likely that the military will find itself in increased competition with both industry and institutions of higher education for the same limited resource. In contrast to the declining number of younger Americans, the number of immigrants

(both legal and illegal) is increasing significantly. Since 1970, the volume of reported net immigration has grown substantially, from an average of 359,000 from 1970 to 1974, to 551,000 per year from 1980 to 1982 (+53%). Immigrants represent a valuable human resource for both the military and private industry. Reported immigration has accounted for an increasing percentage of total population growth, rising from 16.2 percent in 1970 to 1974 to 24.2 percent in 1980 to 1983. Utilizing the significantly increased number of immigrants could be a possible way to help alleviate future military recruitment problems. While the recruitment of ethnic minorities may seem an admirable social goal and a practical solution in peacetime, wartime losses of overrepresented groups could cause national controversy as it did during the Vietnam War.

C. Industry Perspective: Demographic trends indicate that the population of the western states, with the exception of California, New Mexico, and Montana, will increase more than 40 percent by the year 2000. The largest increase will occur in the Rocky Mountain states where the population is expected to rise by over 77 percent. It appears that industry too will be moving into these fast-growing areas. The fastest growing sector in business has been and will continue to be in the service industries. The U.S. Department of Commerce predicts changes in industry growth patterns as outlined in the following table.

RAPID GROWTH	DECLINING GROWTH
Computer Services	Real Estate
Personnel Supply Services	Insurance
Savings and Loan Associations	Loan
Legal Services	Law Offices
Health and Medical Services	Railroads
Holding and Investment Offices	Variety Stores
Transportation Services	Miscellaneous General
Telephone and Telegraph Services	Merchandise Stores
Commercial Banking	Household Appliance
Management, Consulting, and Public	Stores
Relations Services	Gasoline Service Stations

The decline in the number of qualified workers for entry-level positions will have a similar impact on private industry. On the average most people in entry-level positions are about age 22. At the end of 1985 there will be approximately 4.3 million of them in the workforce. By the end of 1996, this total will be 3.2 million, a reduction of more than 25 percent. Finding alternative sources of new workers is fast becoming the foremost task of human resource professionals. Further exacerbating this problem will be increased competition from colleges and universities striving to keep their classrooms full. Competing with both industry and schools for this market will be the military trying to obtain people to meet their manpower requirements. Possible groups from which to draw new entrants into the labor force include women and immigrants. For instance, the number of women in the workforce grew 20 percent faster than the number of men during the 1970s. If this trend were to continue, it could help ease some of the problems of a lack of people for entry-level positions.

<u>Future Concerns</u>: An array of issues need to be considered:

- If higher ability recruits are going to be necessary to man the military of the future, is there a way to achieve this under the all-volunteer concept?

- Will increased emphasis on the recruitment of non-traditional sources of labor be required to meet manpower goals (i.e., women, immigrants, etc.)?

- What will be the long-term impact of increased participation of women on the future civilian labor force?

- What impact will increased numbers of older workers have on the total labor market?

<u>Desired Outcomes</u>:

- The advent of microcomputers and dependable subscription databases should enable more human resource managers to keep track of demographic trends so they may contribute more fully to overall organization planning in large organizations.

- Increased research to determine non-overlapping demographic groups and subgroups. This can be beneficial to the military and larger private sector employers as they recruit from the same temporarily shrinking pool. Each must maintain a constant inflow (or else make significant structural modifications) even during periods of fluctuating supply and demand.

- Integration of attitudinal data into labor supply models. Is such a marriage of statistical and social sciences feasible, or is this type of data too unreliable? If such data are extensively used by organizations, won't the targeted recruit market be too homogeneous? What would the social implications of such policies, particularly in the case of military recruitment, be?

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PANEL 2 - HIGH TECHNOLOGY — MEETING THE EMPLOYMENT NEEDS

ISSUE B - RECRUITMENT CHALLENGE

Statement of the Issue: An anticipated entry-level labor shortage and the continuing demand for personnel with higher technical capabilities is challenging the often provisional nature of personnel planning. What kinds of recruitment and related personnel strategies have been devised by organizations to deal with the future demographic and behavioral changes in the workforce?

Background:

A. General: A significant drop in the number of young persons available for entry-level positions in both private industry and the military is occurring now and will continue until near the end of the century. By the end of 1996 the number of 18 to 23 year olds (both male and female) available for work will have dropped by approximately 20 percent from the 1981 high point. Consequently, industry and Defense organizations are faced now with developing programs by which they will more effectively attract recruits from the shrinking pool of qualified personnel. Competitive pay, pay-for-performance, and expanded educational benefits are some of the most popular programs that have been successfully used by organizations. Other programs include improved recruiting efforts, reduced employee turnover, and an expanded role for women and immigrants, all in an effort to help meet the recruitment challenge. Increased use of automation might ease the recruitment challenge for some industries though to what degree is unknown. What will the new personnel qualifications be, and can these requirements be easily met through the future labor market?

B. Defense Perspective: Programs designed to meet the future challenges of recruitment are presently in use by the military. Competitive pay programs have been introduced to bring salaries in line with those in private industry and have had a positive effect on enlistment. However, a vigorous national economy could mean greater job opportunities and higher pay in the private sector, decreasing reenlistment and reducing the appeal of military recruiting. Successful recruitment will rest on the military's ability to sell its best points; from a purely individual economic standpoint, the preservation or improvement of the military retirement and benefits system could be crucial to attracting the desired manpower. Improved educational benefits could also be used to attract new recruits. An increase in the number of military recruiters in the field, in conjunction with a media campaign have been used to compete for the attention of eligible youth.

The potential pool of recruits has increased due to changes in accession policy. Our nation's female population has become an important source of new military (as well as business sector)

recruits. The increased number of female recruits releases some male recruits from support roles, thus potentially allowing a greater number for possible enlistment in combat positions. Increasing numbers of immigrants constitute another demographic group potentially providing an increased human resource flow suitable for military (and business) recruitment. Reported immigration as a proportion of the overall change in total US population increased from 16.9 percent between 1970 and 1974, to 24.2 percent between 1980 and 1983. If this trend continues, immigrants will comprise over 25 percent of US population growth in the years to come. Integrating these people in proportion to their numbers will no doubt be a significant recruitment challenge if an attempt is made to have a demographically representative force.

C. Industry Perspective: With a 20 percent decrease between 1981 and 1996 in the number of male and female 18 to 23 year olds, it could be increasingly difficult for industry to find people for entry-level positions. Internship programs will probably continue to grow and become a highly popular means of recruiting the most talented college students. Many companies expect strong internship programs to build ambitions and loyalties by treating each intern as a potential career candidate. This will be beneficial in terms of individual career and organizational development; it affords managers the opportunity to see how well the individual performs on the job while at the same time giving the intern needed experience. The offering of educational benefits by the employer, career path planning, attractive assignments and performance-based pay incentives are all being successfully used to attract and retain talented individuals. Corporations have been increasing their recruitment resources, especially in the area of campus recruiting. Some companies have been expanding recruiting to be a year-round effort, not just during the traditional spring peak season. Alternatively, some organizations have been decreasing their need for new workers by retaining older workers longer, a strategy which has the additional benefit of saving money spent on retirement benefits. Increased attention should also be paid to developing new pools of human resources. The number of women entering the workforce has increased by over 20 percent since the 1970s. Women pose a unique recruitment challenge since they are difficult to isolate and do not necessarily behave as an identifiable group. The increasing immigration growth could also provide a large number of prospective workers. All forecasts could change, however, if technological improvements trigger radical new job requirements, both quantitative and qualitative. These uncertainties should be approached within an informed planning environment where structural and procedural modifications can easily be made. Many organizations are adapting to a changing environment by establishing flexible, highly responsive management. The problem of recruitment is merely one component of a larger total personnel planning challenge.

<u>Future Concerns</u>: An array of issues need to be considered:

- How big a role will automation and robotics play in future recruitment strategies? Will it make more human resources available for Defense? What will be the new qualitative demands on the work-force? What skills will be in demand and how accurate are our current assumptions regarding them?

- Will there be a need for more qualified persons in the military? Will *minimum* entrance standards remain at present levels? Could recruiting methods produce a "two-class" military -- one containing specially-trained, elite technical personnel and the other lower echelon workers?

- What impact will the decline in the coming entry-level labor supply have on retirement patterns? Is it appropriate for organizations to create incentives or disincentives in the retirement benefits system?

<u>Desired Outcomes</u>:

- Improved ties between trainers and employers (civilian and military). Some employers have established ties with universities for recruiting talented graduates. However, these practices are generally typical of the larger, more innovative and aggressive organizations. Perhaps more medium-sized companies and government agencies should develop internship and young professional programs to attract and develop potential career candidates. The benefits of positive on-the-job or post-recruitment socialization of younger employees may be highly influential in shaping lasting behavior patterns. With such a personnel approach some organizations have managed to eliminate much of the stimulus for changing jobs so frequently.

- Development of alternative or improved recruitment channels, simultaneously developed as training and educational tools. Such an arrangement may be necessary if available entry-level work candidates are not meeting organizational expectations.

- In the rush to recruit from the shrinking pool of available young workers, many employers have given emphasis to *numerous managerial*, organizational and financial incentives to attract top candidates. This recruitment challenge may generate a significant reallocation of time and money. The long-range impact of these reallocations may disrupt retirement systems or have serious effects on the efficiency and effectiveness of the entire organization.

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PANEL 2 - HIGH TECHNOLOGY

ISSUE C - HUMAN RESOURCES FORECASTING

Statement of the Issue: Human resources forecasting is becoming a popular technique for planning and managing employment requirements. What forms of forecasting are available? How are these forms suited to computer modeling?

Background:

A. General: Facilitated by decreased cost and increasing capabilities of microcomputers, human resource managers have begun to make greater use of demographic labor force trends and compensation data in organization planning. Human resource forecasting has been used extensively by the military for preparedness, predicting with reasonable accuracy the availability and retention of manpower. Similar applications by other government and large private sector employers concentrate on demographic, geographic, and salary data as inputs in predicting workforce trends. Similarly, changing attitudes and occupational trends have been incorporated by demographic researchers and human resource managers in their computer-aided models. Given the level of methodological as well as technological sophistication, these data can be manipulated according to multiple and changing assumptions. Human resource forecasting is quickly gaining salience in corporate strategic planning as entry-level employment shortages begin to appear over the next 10 years. In addition to analysis at the aggregate or macro level, organizations can plan for the types of positions that will be in demand for the labor force. A related aspect is the increasing number of women entering the workforce. Several types of common models have been used, among them trend extrapolation, time-series analysis, and regression analysis.

B. Defense Perspective: For such a large employer as the military, human resource forecasting is an integral part of maintaining readiness. Manpower managers continually seek improved models and more accurate input in finding ways to meet future accession requirements. Other functions include tracking and predicting internal supply and demand trends as well as keeping tabs on private sector manpower figures and the changing attitudes that may affect them. In forecasting, internally-generated numbers and census data are employed to facilitate a greater command of future staffing problems. Inventory prediction models are used to define how much of the present force will be required at times in the future. Another type, the requirements determination model examines three general areas: determining the manpower requirement for newly-deployed weapons systems, estimating manpower requirements for projected operating units, and allocating personnel based on present and future workload. Another

type, the retention model, is used to project reenlistment and retention rates and to simulate changes in retention rates due to compensation policy changes.

C. Industry Perspective: In industry, forecasting techniques are used as tools for shaping the personnel planning of a corporation. Particularly for large employers, workforce demographics affect the entire human resource field from recruitment to retirement. Personnel matters such as compensation, training, or career development become the policy instruments which can be applied in various configurations to adjust for disruption in a present equilibrium condition in the labor market. Changing technology and input mix of labor and capital affect equilibrium and conditions. Also, sex, race, age, geographic, behavioral, and attitudinal characteristics of the workforce change over time; all have impact in organizational planning -- in varying degrees according to the nature of the business. The increasing number of women, the wider distribution of minorities across occupational fields and income levels, the aging workforce, increased migration of workers to "Sunbelt" cities and the Rocky Mountain area, and various aspects such as job mobility and wage expectations have been incorporated in elaborate human resource forecasts. Complex aspects of compensation and benefits packages, retraining and productivity tend to complicate decision-making. Moreover, when addressing multiple personnel problems, there is always the threat of conflicting policy instrument choices. Enhanced predictive capabilities of the forecasting models rely on statistically sound methodologies that are well-suited to the precise application. The assets and liabilities of such techniques as trend extrapolation, time series analysis, and regression analysis should be taken into careful consideration.

Surveys have shown that few companies had any sort of computer-aided personnel planning prior to 1974, nor were multiple scenario simulations extensively used. The advent of the microcomputer and its wider proliferation through many organizations have enabled a greater number of human resource managers to keep, at minimum, a reference database of demographic information for support of corporate programs and strategic planning. Without funding costly studies or hiring outside consultants, reasonably accurate models can be developed to incorporate an expanding pool of workforce data variables.

Future Concerns: An array of issues need to be considered:

- With a burgeoning subscription database market, sponsored by many divergent interests, how will the reliability of information be affected? Will market forces -- increased competition -- improve quality of information, or will there be too many unique sources? Will this create a quagmire for quantitative analysis?

- Will multiple-scenario modeling burden management in decision-making? Will it contribute to an informational overload?

- Models may be manipulated to justify already-made management decisions, undermining a model's usefulness. How can this situation be avoided?

- Organizations may be reluctant to employ some of the various fore-casting techniques because of the costs involved, particularly the initial investment costs. What might be the characteristic differences between government, military, and private organizations in handling such a dilemma?

Desired Outcomes:

- Improvements in the specific applicability of new variables to reduce the forecasting margin of error.

- Improved human resource forecasts. The greater the predictive accuracy of the human resource forecast, the less the inclination of management to doubt it. Not making use of accurate computer-generated personnel policy models results in inefficient allocation of organizational resources.

- More effective and timely use of human resource forecasts to make rapid adjustments to changing market conditions, workforce demographics, and attitudinal/behavioral attributes, thus preempting the adverse effects of negative resource trends.

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APPENDIX 3

PANEL 3 REPORT: EDUCATION (TRAINING AND RETRAINING

PANEL 3 REPORT

EDUCATION (TRAINING AND RETRAINING)

1. **INTRODUCTION:**

Panel 3 was chaired by Mr. Sam H. Pruett, with Vice Admiral James A. Sagerholm serving as assistant chair. Table 3-1 lists all Panel members as well as recorders and observers, together with their respective primary private or public sector affiliation.

2. **ISSUE TITLE:** Educational Needs

a. Viewpoints:

During the next few decades, the escalating pace of technological change will increase the demand for higher quality skills in both the government and private sectors. Simultaneously, the declining youth population and the overall poor history of the public school system in the recent past in producing sufficient numbers of properly educated youth suggests it will be increasingly difficult to obtain adequate levels of competent workers. Retraining can lessen but not solve the basic problem of increasing the number of trainable individuals who are willing and able to learn and relearn in order to adapt to a changing society and new technology. A critical period occurs within the

TABLE 3-1

PANEL 3: EDUCATION (TRAINING AND RETRAINING)

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primary and secondary school systems where students either establish or fail to obtain key basis skills through an adequate core curriculum and the inculcation of work and study habits.

b.   Discussion:

The issue as stated above begs a number of other important questions, such as: 1) have we, in fact, clearly articulated our needs to the public school system? 2) How much concentration is needed in core skills as opposed to socialization activities? 3) How early in the educational process and to what extent do we need to teach technological skills? 4) Will public education eventually respond to the needs of the market or is special directed action required? 5) If, in fact, we can agree on a message to send to the public schools, how do we send it and to whom? 6) What should be the nature of the interface between those who hire students (industry, government, etc.) and the public schools? While the answers to these questions are debatable, it was agreed that the nation is faced with a very serious long-term problem. We believe the solution lies in raising proficiency standards and better teaching of the basics. The emphasis ideally needs to start in the elementary schools. Whatever will be done, however, depends upon <u>communicating</u> the needs, establishing commitment and providing resources.

c.   Resolution:

The Panel noted that methods such as providing literature expressing specific opinions with local and national media attention, and parent/student involvement are positive vehicles to produce change. The Panel members agreed

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that clearly and persuasively communicating educational needs is the key. National marketing campaigns that have elicited positive and broad-based response on public interest issues such as this include campaigns to communicate messages for the United Appeal, the United Negro College Fund, Mothers Against Drunk Drivers, and others. The Panel concluded that a clear message urging a major improvement in public education should be developed and given high priority. A marketing plan should determine specifics of the message, the target audience and the most effective medium to be used.

3. **ISSUE TITLE:** Impact of High Technology

    a. Viewpoints:

High technology and the accelerating pace of technological break-through requires new and innovating forms of education and training. The education establishment has been slow to respond to the needs of industry. The requirements for training by industry generally are met by in-house programs that meet specific company needs. The changing role of unions needs to be studied and differentiated between smokestack industries and new technologies. Specifically, management and unions have moved toward one another in establishing goals.

    b. Discussion:

Because of the increase of high technology, industry is finding that there is a need to go outside the corporate environment and use external resources to complement their internal training structure. Turning to the education establishment has been frustrating because of the fixed structure of

the campus environment. The concept of enrolling in courses for an entire semester at a fixed time and place must give way to new techniques. Technology can enhance our system of education. Traditional means of education can be supplemented in certain instances by remote site and short courses that are learning-intensive. The use of telecommunications, satellite hook-ups, and innovative technological methods needs to be encouraged. The slowness of the education establishment to respond to these changing needs has given rise to proprietary institutions that provide the catalyst to ensure education design courses to meet industry needs.

c. Resolution:

There should be better articulation of the problems caused by the impact of high technology between government, industry and educators. The users of the educational establishment must clearly identify and articulate their needs, support the required resource allocations and, above all, the education establishment must become more flexible in meeting the needs of a changing society.

4. **ISSUE TITLE**: Retraining Whom? When?

a. Viewpoints:

Both industry and the military must be concerned with retraining. Needs arise within an organization due to skill imbalances or for career development reasons. On the societal level, other needs arise due to massive shifts such as the decline of smokestack industries in America.

b.   Discussion:

The military and many private sector groups depend totally on promotion from within. Thus, skill imbalances cannot be solved by releasing workers in surplus skills and hiring workers to fill shortages. Furthermore, the military is reluctant to deny reenlistment to qualified personnel simply because they are in surplus skills. Therefore, the military is committed to an extensive retraining program. While industry could "fire and hire", many companies will offer retraining first as a matter of policy. In addition, industry is often forced into retraining because they are at the leading edge of a particular technology and cannot find people who are already trained.

c.   Resolution:

The Panel did not perceive retraining within the organization as a significant issue. It is merely a fact of life, and of primary importance is having people who are retrainable when the need arises. The larger issue of retraining on the societal level poses major questions which require special, focused studies.

5.   **PANEL CONCLUSIONS:**

a.   The increased pace of technological change has resulted in large skill imbalances. On the surface, the issue would appear to be retraining with all of its associated complexities (who? when? how can training technologies help?). While retraining can mitigate the problem of skill imbalances, the Panel agreed that the larger issue is the public education system. It is now apparent that

rapid technological change is here to stay and that retraining will become a normal event. At issue is whether or not the next generation of workers will have the basic skills to be able to re-learn and be retrainable.

b.   Emphasis needs to be placed on core competency, higher proficiency standards and discipline. Developing this competency requires commitment and resources, perhaps including non-traditional means of funding (e.g., lotteries, industry-endowed academic chairs). However, for anything to be done, the basic need must be communicated and parents, educators, legislators and even students themselves must be energized. To this end, the Panel concluded that a joint government and industry-sponsored marketing plan must be built to develop the specifics of the message and the means to send it.

c.   The Panel recommends that subsequent meetings be convened to discuss possible marketing plans and next steps. It is essential that these meetings include both the consumers (government and industry) and producers (educators) of trained graduates.

PANEL 3 - EDUCATION (TRAINING AND RETRAINING)

ISSUE A - CORPORATE NEEDS; MILITARY NEEDS; AND INDIVIDUAL NEEDS

Statement of the Issue: The quality of the output of the American education system has been steadily decreasing as measured by the technical capabilities of its graduates (science and math). The quantity of technically competent graduates has decreased. These decreases have, unfortunately, occurred in the face of undiminished demand from both the military and civilian sectors for skilled, and competent graduates with basic technical qualifications. How might the military and/or industry foster increased numbers of graduates and enhanced technical capabilities as an output of the American education system? Can training and retraining programs reverse these trends?

Background:

A. General: For perhaps the first time in American history, it is expected that the current generation of youth will not have surpassed their fathers' education, nor are they expected to enjoy a notably enhanced standard of living over that of their fathers before them. These are some of the findings of the Department of Education's alarming report, A Nation at Risk. The quality of American education has been seen to steadily decay in the midst of a technology revolution. The demand for technically trained persons is outstripping the capability of our educational system. A survey by the American Electronics Association underscores the need to fill more than 140,000 new paraprofessional engineering jobs -- not even taking into account necessary replacements for workers lost through attrition. The Defense Department forecasts shortages as early as the end of this year in the number of engineering and electronic technicians, data processing, and machine repair specialists. Only 6 to 7 percent of our undergraduate degrees are being awarded in the engineering disciplines. Japan is awarding 21 percent; the Soviet Union 35 percent; and West Germany 37 percent. At least half of all US graduates never had a single year of chemistry or physics. Beyond the 10th grade, only 6 percent of US students take math. A Rand report predicts a teaching "crisis" by the end of the decade as the continuing decline in the quantity and quality of teachers coincides with the surge of students from the current "baby boomlet". Companies are beginning to rely more heavily on foreigners to fill the skilled technician gap.

B. Defense Perspective: Technological superiority is indispensable to success in the nuclear deterrent and general war missions. The electronic revolution, particularly through advances in high speed data processing, has increased the effectiveness of defending forces and improved the penetrability and reduced the vulnerability of attacking forces. The US is ahead of the Soviets in these areas and the competition to retain this technological edge is intense. The force structure establishes the broad parameters of military manpower demand. In less

obvious but more fundamental ways, technology is creating even greater manpower demand than force structure. The Services rely increasingly on technological advantage for warfighting success. While in individual instances technology works to lower total manpower requirements, in an aggregate skills context technology creates the need for more skilled people. The specific evidence detailing the impact of technology on manpower demand is largely anecdotal. The Department of Defense, nonetheless, recognizes the necessity of both accessing and retaining higher numbers of technologically competent and skilled personnel. This effort, however, occurs coincident with an increasing demand from the non-military sector for similar personnel. At the same time, the technological skills of American youth cohorts on the whole are deteriorating. The non-military sector has a far greater competitive advantage with respect to attracting these increasingly scarce persons with salaries that the military can hardly be expected to match. The net result of these trends, if unchecked, is likely to cause a severe threat to the technological superiority of the US Military. The Defense Department must develop new approaches to addressing this growing crisis. New personnel incentive, training, and retraining programs must be developed to enhance the military's competitive capability. Furthermore, the military training function might well contribute to the industrial efforts to reduce the downward trend in the technological capabilities of the younger American workforce cohorts. Either joint or independent programs promoting science and math skills at early ages might well provide more skilled technicians to both the military and industry.

C. Industry Perspective: Companies have become aware that the low level of verbal and mathematical competence among high school students directly affects the quality of the final product from universities. What has particularly disturbed them has been the issuance of no fewer than six alarming reports on education deficiencies in an 18-month period. These included A Nation at Risk from the Department of Education, and the National Science Board report entitled Educating Americans for the 21st Century, which proposed sweeping changes to reverse a 20 year quality deterioration trend. Many corporate officials feel that new technology is helping to precipitate a radical change in education systems. They are "now on the cusp of a revolution" says L. Scott Miller of the Exxon Educational Foundation -- one leading to a far more flexible education system that is more finely geared to the needs of both individuals and of society. The movement is being led by such large national companies as Hewlett-Packard, Exxon, IBM, Lockheed, and Digital Equipment Corp., to name a few. Most corporate-sponsored programs are focused in their geographical areas. In Houston, for example, more than 100 companies are contributing about 1000 employees to teach in city high schools. Efforts are also being made to form a consortium of national companies that will offer high school students and teachers salaried technical jobs during the summer. The root of the problem, as corporations are coming to see it, is teacher training. Some companies think the world would be better off without teacher training colleges. One company is even designing a new model. Although reform of colleges of education is not now a major corporate goal, some companies -- like IBM -- have decided to focus their pre-college efforts on teacher training. It may be some time before any drawbacks to these various initiatives become apparent. New

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relationships with industry as well as higher industry salaries could help speed the drain of teachers into the private industrial sector. John Fowler of the National Science Teaching Association suggests that "adopt-a-school" partnerships could lead to "company schools".

Future Concerns: An array of issues need to be considered:

- Will the "tech" gap be filled by foreigners?

- How active a role should industry play in providing education?

- How can the downward trend in scientific and technical education be reversed?

- What can industry do besides providing dollar resources?

    - Program development.
    - Incentive programs.
    - University cooperatives.
    - "Adopt-a-school".

- Will "adopt-a-school" lead to the establishment of the "company school".

- Is military education and training 100% exchangeable in the non-military sector?

- Is there a basis for technical cooperation between civilian and military sectors?

Desired Outcomes:

- A detailed action plan aimed at reversing the decline in the technical education and capabilities of American youth.

- Increased industry and military participation in the process of developing a technically educated and skilled workforce.

- Mutual private sector and military support for increased levels of technical education and training.

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PANEL 3 — EDUCATION (TRAINING AND RETRAINING)

ISSUE B — IMPACT OF HIGH TECHNOLOGY

Statement of the Issue: In what ways can we make better use of education and training resources to avoid shortages of skilled personnel in fields experiencing rapid technological change?

Background:

A. General: In an economy which is becoming increasingly service and information-oriented in the midst of an "information revolution," new training and retraining requirements are increasingly apparent. As industry moves into the specialized high-technology manufacturing and service sectors, government, the private sector, academia and the military must make a concerted effort to keep pace by collaborating to assure adequate education and training from the high school level to the corporate classroom. Aging traditional industries — heavy industrials like steel — did not receive the capital investment needed to remain internationally competitive; their workers still find themselves unemployed and, in many cases, apparently unemployable in the foreseeable future. The international standing of this country in matters of trade, capital formation and even domestic tranquility relies quite directly on whether people are at work — at work in growing sectors of the economy with predictable future growth trends. Some high-technology growth industries are now experiencing shortages of qualified labor, highlighting a clear deficiency in our overall system of education and training — at least in the short run until the nation's training and retraining institutions take steps to correct the problem.

B. Defense Perspective: The impact of high technology in the Department of Defense (DoD) is critically apparent in the crucial area of readiness. Training and training technology are central to effective US military operations. A high-technology military has operational advantages, but must constantly face a potential training technology bottleneck. With the direct support and encouragement of the Congress, DoD has just established the new DoD Training Data and Analysis Center (TDAC) to become a clearing house for training data and training technology as a means of helping to address such potential bottlenecks. The US Armed Forces do build a technically trained manpower pool largely on their own; they provide the technical training and experience required to fill their own positions. This capability is not enough, however, if recruits are increasingly deficient in areas of scientific and technical basic training received in the nation's schools, and cannot express themselves with reasonable proficiency. Advanced instructional techniques are being implemented by DoD along with new training technologies to provide military trainees with the technical skills necessary to run a modern

military force. In this context, a recent Defense Science Board study on Training Technology tabled two recommendations on training technology supporting: the accelerated use of computer-based instructional methods in the schoolhouse and on-the-job via portable aids and/or embedded training systems; and the use of advanced job-site video and microprocessors as training devices to increase recruit awareness of job characteristics/benefits.

C. Industry Perspective: It has been emphasized by some informed observers that job retraining programs will prove to be far more beneficial socially and more cost-effective than the large public and private sector costs of unemployment insurance programs. Competition and economics alone cannot provide the motivation or generate the capital for private industry to change the face of American education and training systems. Though some companies are establishing links with local government and with universities for both R&D and technical training purposes, and are operating their own in-house classrooms, a broad coordinated effort by government and industry is seen as essential if the labor market is to ultimately receive better basically-qualified people. Schools must address the new requirements and toughen their curricula, while industry homes in on the advanced technical and applied skills necessary at specialized manufacturing and service sector levels.

Future Concerns: An array of issues need to be considered:

*   Companies are disinclined to invest millions in training facilities and curriculum development if they will not reap direct and tangible benefits. Tax incentives and further government training support programs may be needed to provide the necessary impetus and national direction to regain our national competitive posture.

*   Continuing education opportunities are needed in many fields. Both government and private industry need to work more closely to most effectively employ the resources already available (adult education programs in public schools, university continuing education, etc.).

*   A unified approach is necessary if the right kinds of education are to be offered. Training must address the weaknesses in the projected supply of labor in the United States -- diminishing youth populations through the end of the century, and only nominal annual growth in the aggregate labor force. Reasonable capability to predict the job requirements of the future becomes imperative.

Desired Outcomes:

*   Focus on retraining for minimal displacement. The political and social costs of unemployment could have near-fatal economic impacts.

*   The burden of technological retraining cannot be shouldered by industry or government alone. Succeeding generations need to enter the workforce with the proper skills, and this starts in primary and secondary schools. Joint industry and government action is required to give the right direction to the nation's school systems.

- Labor unions need to adapt to the changing environment as well. A new approach is needed, and it is not inconceivable that unions could play a decisive future role in fostering worker productivity and performance efficiency.

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PANEL 3 - EDUCATION (TRAINING AND RETRAINING)

ISSUE C - RETRAINING WHO? WHEN?

Statement of the Issue: What factors influence an organization's retraining decisions? How are candidates selected and what are the criteria used? Are there physical, psychological, or other impediments to retraining employees at particular stages in their career cycles?

Background:

A. General: The philosophy of training and retraining has changed in the past generation from an expected once-during-a-career occurrence to two or three training periods directing workers into new career channels. This process is accelerating, new workers entering the workforce should be trained -- or retrained -- every 2 or 3 years. Managers and workers must be aware of this and prepare for the problems and challenges which it offers.

The importance of retraining is underscored by the changing demographics of the workforce. The mass of "baby-boom" workers will be the primary candidates for retraining as they move into middle-level management positions in an age of rapidly changing technology. This challenge has been treated as a strategic organizational objective, but quite often the determinants of who gets trained and when are due in large part to factors beyond organizational control. For example, training and retraining are used as rewards or retention incentives, sometimes independent of need or utility; it is also included as a provision in many new labor union agreements. These competing goals can contradict the highly objective oriented and variable nature of organizational education and training. Since high-tech retraining has a brief history as an issue for decision-makers, economies are sought to offset the immediate costs of undertaking these activities -- quite simply, not everyone can be retrained. Organizations are turning their attention to how they can most efficiently attain their goals. Consequently, some employees may not prove to be good candidates for retraining, thus not warranting the investment; others may have greater difficulty because of their age. Devising scientific formulas that take into account age and aptitude are bound to create controversy. These concerns should be paramount to an efficient education and training program. More recently, however, moves have been underway in both government and industry to coordinate all aspects of human resource development under an integrated planning structure. While this may address organizational requirements, it does not inherently resolve the basic cost-benefit issues.

B. **Defense Perspective:** For the military, training is virtually the most important peacetime mission. Career development of military personnel has generally included "cross-training" into other jobs as a desirable method of broadening skills and knowledge. A renewed emphasis on training and training technology throughout the Department of Defense is underway, addressing the highly dynamic nature of the military's technical apparatus. Teaching high-demand skills and providing clear-cut career development paths are elements in the approach military services use for retaining talented personnel and competing with the private sector for qualified accessions. The continuous nature of training prepares officers for a multitude of leadership situations and provides these individuals opportunities to apply and develop their own intellectual and professional attributes. Thus, retraining takes on a much higher priority in national defense if the goal is preparedness. This does not mean that there are fewer costs involved. To the contrary, the Armed Services have been in the process of centralizing and standardizing their entire training establishments, both to realize economies and to attain a greater degree of central control over training quality and outcomes.

C. **Industry Perspective:** Identifying and nurturing talented, high-potential people is the prerequisite to growth in a business environment characterized by quantum leaps in technology. After taking into consideration costs and human factors, managers are generally faced with arbitrary (or at least very subjective judgments) to determine which candidates could provide the best return on the retraining dollar. A liberal approach to retraining can often fall victim to economic realities; such an approach is often encouraged by the high expectations of retraining. Some available in-house industrial or clerical workers may not possess the basic cognitive skills to make good candidates for high-technology jobs. Moreover, labor unions have exerted increasing influence on retraining issues in the recent past, particularly since businesses are finding it a feasible and somewhat less costly alternative than salary increases. Quite often, new provisions do not allow selective retraining. There has also been some concern that age may be a factor in determining a retraining candidate's "compatibility" with new technology. Top management is becoming increasingly aware of the diversity of technological information necessary for operating a modern business, and these information requirements can potentially limit the role managers play. Managerial "obsolescence" is reported in the literature to be prominent, but neither corporations nor universities have been able to augment or to significantly redesign the standard MBA curriculum to prepare managers for the new responsibilities and new management technologies. The standard models of management are finding little applications in some advanced fields. As employees are reaching the higher stage of their careers far before their retirements, retraining questions gain significance in terms of the quality-of-work-life, morale and worker satisfaction. A stagnation of human capabilities may slow down an entire organization.

<u>Future Concerns</u>: An array of issues need to be considered:

- Who will accept responsibility for the terminally unemployed if industry is inclined to base its selection criteria upon candidates who will give the highest possible return? How have state programs helped? How will these decentralized offerings be tied into national industrial training objectives?

- Are the expectations of human resource managers for the retraining of the workforce too high? How are these expectations coloring the decisions of top management on organizational resource allocation?

- Can the declining prices in state-of-the-art computer hardware and software impact upon training? Will this lessen the cost directly? Reduce the labor required to operate such retraining programs? Can effective training software and more user-friendly systems lessen the time in training and make learning computer skills less arduous?

- Are the highly diverse and technical requirements of being an effective senior manager becoming too great? Will this lead to further compartimentalization of these organizations or will managerial talent accept the training challenge?

<u>Desired Outcomes</u>:

- The burden of retraining workers cannot rest solely upon business or government. A national focus will influence educational institutions to become responsive to social needs, otherwise the labor market will be chronically short of qualified people. The effort must be comprehensive and dynamic, reaching from primary education to on-the-job training.

- For those that cannot be retrained on the job, other opportunities should exist for them to realize their full potentials in the workforce   State and federally run programs can provide additional relief where the private sector cannot.

- Tax incentives for retraining as a national priority can be useful in steering the US economy into more productive economic areas.

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APPENDIX 4

PANEL 4 REPORT: CHANGING ORGANIZATIONAL CULTURES

NATIONAL FORUM ON HUMAN RESOURCE PLANNING

FOR PRIVATE SECTOR AND DEFENSE LEADERS

PANEL 4 REPORT

CHANGING ORGANIZATIONAL CULTURES

1. **INTRODUCTION**:

Panel 4 was chaired by Mr. Harold K. McCard, with Lt. General E.A. Chavarrie serving as assistant chair. Table 4-1 lists all Panel members as well as recorders and observers, together with their respective primary private or public sector affiliation.

2. **ISSUE TITLE**: Planning and Managing Cultural Change

SUBTITLE: All a crisis does is ruin your weekend -- it takes a catastrophe to create a real change.

a. Viewpoints:

The Panel took note of "McFeeley's Law", which asserts that no fundamental change in an organization occurs without a change in leadership.

In facing the issue of substantive change, the basic assumption should be that people want to do what is right; they need to know what is right in an organizational context. Adherence to that fundamental principle assures that the individuals involved will be able to execute the mandate for change.

TABLE 4-1

PANEL 4: CHANGING ORGANIZATIONAL CULTURES

PRIVATE SECTOR	GOVERNMENT
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Significant factors that impact upon cultural change include:

- Crises such as World War II, Korean Conflict, Vietnam, etc.

- Top leadership changes and the accompanying transition between centralized vs decentralized management styles.

- Quantum technology advances such as the advent of nuclear applications.

- Institutional structures and traditions, such as those prevailing in the Military Services vs private industry.

Effective change must be supported by thorough analysis of cogent data. The data selection and analysis process must be carefully focused. Too much unanalyzed or irrelevant data, or too little data, can work against effective progressive change.

Clever coalitions can effect change; that is, between champions, mentors, and outside support (e.g., academia, Congress). In any case, change should be focused upon what can be changed. Control of managed change can proceed from macro (strategic) to implementation managed at the micro level (e.g., "here are 10 things to do").

Changes are driven by external and internal events, and there is always some need to change. It is very important to identify what change one is going after. The smart manager who sees a valid need to change creates a

"crisis" (i.e., precipitates an event) around it as a means of assuring effective implementation.

Institutional resistance to change may not be all bad. Among other things, it can preclude abortive attempts to react to too many "short-fused" projects. By the same token, management must remain sensitive to changes "bubbling up" in the institutional environment. This is part of the important management responsibility to encourage new ideas in a search for excellence.

b. Discussion:

Panel discussion focused upon private industry and military differences and similarities. These are capsulized below:

- Private Industry

    - Prime objective is profitability
    - Marketplace forces change
    - Excels in creativity
    - Use attitude surveys to ascertain bottom-up needs
    - One company approach:
        -- Determine what is driving change
        -- Determine what we want
        -- Determine what we don't want
        — Determine what to change
        — Determine ways to effect change
    - Hold "skip-level" meetings (CEO with secretaries)
    - Can get clear signals about when to change

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- Company infrastructure facilitates change

- In the private sector, it is easier to reduce workforce

- Enhanced productivity occurs in a supportive environment

- Military

  - Primary objective is battle readiness

  - Technology forces change

  - Influx of women has forced change

  - High quality military forces rethinking traditional ways

  - High retention rates impact quality of life issues

  - Team building essential to combat readiness

    -- Rotation of units instead of individuals

  - Military excels in high-structure units

  - Services have different cultures and need different approaches

  - Efforts to push decisions down

    -- Decentralization

  - Crises may come from outside (e.g., Congress)

  - Military applies state-of-the-art from private industry

  - Doesn't always get clear signals about when to change

c. <u>Resolution</u>:

Recommendations are hard to generalize for all cases. Crisis may be the necessary ingredient for change and should:

- Focus on decentralization.

- Be a major event that all recognize and accept.

To endure, change must be effective change. To be effective, an organizational champion with tenure may have to lead. In any case, the organizational precepts on which change is based must be valid over time.

To accurately identify true needs for cultural change:

- Make planning processes participative.

- Make organizations more sensitive to the need for periodic change in accommodating to their environment.

- Make planning process integral to the management process.

In sum, top managers and organizational leaders must search for positive examples of excellence and display them as examples for others. The leadership must be involved in the ensuing change in organizational culture, and must:

- Identify the need.

- Determine how to make change happen.

- Be able to deal with multiple cultures.

- Be able to measure when effective change has occurred.

- Be able to shoulder the initial inefficiencies which normally accompany organizational change.

3. **ISSUE TITLE:** Personal vs Professional Ethics and Values (NOTE: The Panel decided to combine the final proposed issue "Reconciling Institutional and Personal Values in a Changing Society" [see page 4-C-1] with this issue due to time constraints.)

    SUBTITLE: Ethics is what you choose to do when the rules don't apply or when you have so many rules you choose the one which applies.

    a. Viewpoints:

    Ethics pitfalls are caused by lack of prior thought. As the external culture shifts, ethics rules become uncertain, but ethical principles remain the same. The integrity of value systems is as important as the values themselves.

    It is the responsibility of top management leadership to guide ethics development within the organization. Leaders must be role models for ethical standards. Leaders can create a climate for unethical behavior -- for example, those leaders who say only "make it happen, I don't care how!".

    More deliberate training is needed in the canons of ethics. Such training can minimize the penchant of individuals in the organization to use ethical arguments to support egotistical behavior. In any case, management must

be proactive in addressing ethical questions and should not allow the organization at-large to simply wait until dilemmas in the matter of adherence to ethical standards present themselves.

Loyalty is an important element of the canons of ethics and standards of ethical behavior.

b. Discussion:

Ethical standards for private industry and the Military Services are similar. In both systems, stated values must be consistent with operational values. But the consequences of unethical military behavior can present instant life or death dilemmas.

Getting things done "at any cost" through work-arounds can cover up required institutional change in the matter of standards of conduct and performance. It may also be fallacious to assume that what's legal should always be seen as ethical, and what's illegal should always be seen as unethical in every respect and circumstance. Finally, it is particularly important for the organizational leadership to recognize that it can be unethical to use the end to justify the means.

Ethical behavior within the organization improves productivity because people come to believe in that organization. Ethical behavior should be reinforced by training and leadership, and must be supported by a proper organizational climate.

Members of the Military Services are governed by a formally constituted Code of Conduct which was originally promulgated by Presidential Executive Order in 1955. The Code prescribes strict standards of military comportment for military personnel in combat or in captivity. There is no single written code-of-ethics document for military personnel which prescribes ethical values and standards. The Uniform Code of Military Justice (UCMJ) governing all members of the Military Services may, in some respects, go further than civil law in prescribing personal values and ethical standards applicable among members of the Services in their dealings with one another. Additionally, there are a plethora of military regulations promulgated by the Military Departments which have many of the attributes of law and do deal with some of the ethical facets of personal standards, such as integrity in one's financial dealings. Finally, the military adheres to an "unwritten code" which is perhaps more tangible and regularized than any applicable to other professions, and is exemplified by such traditional practices as the commitment of the Armed Forces Military Academies to the standards inherent in "The Honor Code" and such phrases as "Duty, Honor, Country".

In both private industry and the public sector, individuals as well as leaders can be held legally responsible for unethical behavior.

c. Resolution:

How the organization deals with ethical questions has a great deal to do with the success of that organization. Organizational ethics are directly related to service or product integrity, dependability, and quality. These characteristics, in turn, are the ultimate test of organizational competitiveness and staying power.

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There should not be a difference between personal and institutional ethics. When involved in an unethical situation, neither management nor the individual should accept or try to rationalize events.

Local, national and international cultures and laws can impact accepted ethical standards. In both the private sector and the military organization, a key tool critical to success can be the ability to understand and accommodate to local ethical values.

High technology training may cause individuals to drift away from institutional values in the pursuit of technical objectives. Management must remain sensitive to the need to re-inculcate these basic values.

4. **PANEL CONCLUSIONS**:

a. Panel members were excited about follow-on Forums and expressed enthusiastic willingness to participate.

b. Suggested enhancements to promote the exchange of information and ideas included the use of prepared case studies for both private industry and the Department of Defense, to stimulate innovative solutions and the cross-feed of innovative ideas. Of central significance here, is the use of real or near-real problems for the case studies.

c. The highlight of Panel 4 discussion and activity was the sincere and energetic interchange among all members. As an example, one private industry representative has offered to provide his company's code of ethics to the group.

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PANEL 4 - CHANGING ORGANIZATIONAL CULTURES

ISSUE A - PLANNING AND MANAGING CULTURAL CHANGE

Statement of the Issue: Can keeping your institutional or corporate culture synchronous with society-at-large be beneficial in terms of worker satisfaction, communications and overall effectiveness? Is there a difference in value systems?

Background:

A. General: Although there are a wide variety of writings and speculation on the subject, there exists no generally agreed concrete framework for the concept of organizational culture. Organizational culture is influenced by a combination of three factors: (1) the surrounding society's values and intrinsic qualities; (2) the organization's history; and (3) contingency factors such as technology. The influence and interaction of individual actors within the structure should be the basis of any framework of organizational culture, as it produces a distinct system of symbols molded by these actors. Allowing room for personalities to flourish can either hurt or help an organization, depending on the level of guidance. Keeping track of personality types can be of value in recognizing those with leadership potential. Corporations are restructuring jobs and the decision-making process to encourage the input of fresh ideas by employees and to tap the potential for increasing their input.

"Change" is an inevitable occurrence which just happens. "Managed change" should increase organizational competence. "Managed change" involves active participation in making things happen that are in the best interests of both the individual and the organization. Three classic approaches to managed change, all using techniques and methods common to organizational development, are:

• Intervention theory and method (Chris Argyris): Purpose is for the intervenor to come between or among persons or groups for the purpose of helping them. Intervenor helps client generate valid information and appropriate diagnoses. Client has free choice of alternatives. Change will be positive if it employs valid information, free choice, and internal commitment.

• Planned change (Frohman): A dynamic, seven-step client/consultant process: (1) client explores need for help; (2) client and consultant develop goals, roles, methods; (3) diagnosis, starting with client's perceived problems and progressing to clear identification of improvement goals; (4) planning specific action to be taken to achieve goals, including possible resistance to

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change; (5) communicate reasons for change, then do it; (6) results of changes evaluated; (7) termination of consultative arrangement and client trained in change process.

- Action research (Lippit): A cyclical process with seven main steps roughly comparable to planned change, above.

A forth approach to managed change recognizes that these approaches appear to be essentially reactive in nature. Rather than merely responding to changing societal norms (important as that might be) it may be better for the organization to examine its future (or describe the future environment the organization intends to create) and then analyze the existing organizational culture to insure that it is adequate to help create or reinforce the kind of future environment sought.

B. Defense Perspective: Traditionally, the military organization has been structured in the context of institutional values and norms, based upon a national purpose transcending individual self-interest in favor of a presumed higher good. The military institution is organized vertically, whereas an occupation is organized horizontally. People in an occupation tend to feel a sense of identity with others who do the same sort of work and who receive about the same pay. Horizontal identification implies key reference groups are external to the organization. In an institution such as the military, on the other hand, it is the organization where people live and work which creates the sense of identity that binds them together. The organization one belongs to creates the feeling of shared interest, not the other way around. In the Armed Forces the very fact of being part of the Services has traditionally been more salient than the fact that military members do different jobs. Role commitment in the institution tends to be diffuse, that is, members are expected to perform tasks not limited to their military specialties. Members are under the purview of the military organization whether on or off duty, whether on or off base. A Service member falls under the military justice system. In an occupation, role commitment tends to be specific. The organization deals only with the worker's performance of his assigned task; his behavior away from work is not the organization's concern. In a manner of speaking, the role of institutional membership in the military community extends to the spouse of the Service person. Wives of career personnel are expected to initiate and take part in a panoply of social functions and volunteer activities in the military environment. In an important sense, military families have been supportive or adjunct to organizational purpose. In recent years, there has been a growing reluctance of wives at both non-commissioned and junior officer levels to take part in customary military social functions. (With the increase in numbers of female personnel, there are growing numbers of "military husbands," a category virtually unacknowledged, much less researched.) With a rising proportion of wives employed outside the home, moreover, there are bound to be fewer wives with either the time or inclination to engage in the volunteer work which underlies much of the social life of military installations. There can be notable differences between military services and, within military services, between branches. Similarly, other distinctions can exist, such as those between

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officers, non-commissioned officers and lower ranks, between career and single-term military members, and between men and women. There may even be trends toward "re-institutionalizing" the military, either across the board or in specific units.

C. Industry Perspective: Technical jargon, company myths and formal structures can all impede the adaptability of an organization to a changing society. More researchers have emphasized the homogeneity of culture and its cohesive function than its divisive potential. It is important to reconcile incongruities, put them to work, and approach organizational culture from a multicultural perspective. Subgroups with different occupational, divisional, ethnic, or other cultures conduct organizational interactions with their own meaning and sense of priorities. Ethnocentrism is one danger that can arise, increasing the possibility of misunderstanding and conflict. When viewed from the perspective of the technical professional or the executive, it can symbolize a difficulty in incorporating personal values such as occupational change, advancement and fulfillment into the mainstream corporate culture. Although an elusive phenomenon, the example of the young urban professional is useful in exemplifying a new value system at work. Career goals and demands for variety and satisfaction are outpacing what corporations have to offer, understandably creating a crisis in terms of adaptation. Turnover in many technical and professional fields is rising and executives are having a difficult time holding on to talent in a competitive environment. Though certainly distinct from some of the other potential conflicts in organizational culture (socio-economic/class, race, age, and ethnic differentiation), this example is useful in highlighting areas that could be more responsive to change. In a multicultural approach, the corporate environment and "personality" is designed to give the impression of accommodation; it does not seek a total assimilation of all subgroups. The demands of each subgroup need to be identified through interorganizational social research, incorporated into models and analyzed in the context of best adaptation. This aids organizational development, provides an atmosphere for a more productive workforce, and improves communications.

Future Concerns: An array of issues need to be considered:

- The exact nature of the organizational multicultures must be further studied. Will the numerous subcultures be codeterminative under the umbrella of one larger corporate or government service culture?

- To what extent should the organization develop cross-cutting (occupational, divisional, ethnic, etc.) cultural elements? How will such devices be implemented? What will those unifying themes be and can they keep in synchronization with society-at-large?

- Is the adaptation to overall culture a beneficial aspect when too much energy and too many resources are devoted to its achievement? What is the proper timeframe for such changes?

- How will the military incorporate such multicultural models, if at all useful and compatible with traditional military cultures?

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- All of the foregoing imply that the corporate/institutional culture needs to assimilate and react to changes, societal values, norms, behaviors, etc. This may be the wrong approach. It implies a reactive strategy, whereas, a pre-planned strategy to shape organizational culture and its concomitant implied variables could be more beneficial. As a bare minimum, such a planned strategy should be seen as a major corporate/institutional initiative.

Desired Outcomes:

- Determine how ethnoscience can complement "people values" by providing management with a tool for exploring workers' perspectives in their own terms.

- Determine how organizations can best acquire, and apply, a thorough understanding of existing cultures. Developing a strong, compatible and complementary overall organizational culture may require some redirecting of cultural values but has promise for the organization seeking to assert itself in a changing world -- if and only if a thorough understanding of existing cultures is acquired.

- Confirm or refute the thesis that tapping recent trends such as physical fitness, career development and self-enrichment may provide the vehicle for integrating culture subgroups and raising organizational morale. Company athletic teams, career seminars, etc., are useful, if simple, first steps.

- Confirm or refute the thesis that the specific culture change levers can be understood, identified and defined in much greater detail. It would be through such an endeavor that pre-planned action might then occur.

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PANEL 4   -   CHANGING ORGANIZATIONAL CULTURES

ISSUE B   -   PERSONAL VS. PROFESSIONAL ETHICS

Statement of the Issue: What are professional (business) ethics and how do
they differ from personal ethics? Can conflicting rules of professional and
personal behavior be detrimental to organizational performance?

Background:

A.   General: Dr. Albert Schweitzer said: "In a general sense, ethics is
      the name we give to our concern for good behavior. We feel an obliga-
      tion to consider not only our own personal well-being, but also that
      of others and of human society as a whole".

      A society of many organizations such as ours is a society of inter-
      dependence, one in which relationships and proper behavior are the key
      to prosperity. Because there is such a vast matrix of organizations --
      a vast marketplace -- the disguise of anonymity is easy to wear, and
      some businesses practice in ways that smack of moral laxity. The
      rules of conduct in business are understandably molded by the pres-
      sures and demands of competition, but how is such a set of ethics to
      be reconciled with personal ethics? In most larger corporations and
      in government there is a somewhat different perspective, at least at
      the top.   It is at the lower levels in these organizations that the
      confusion of two codes of conduct becomes manifest. The result can be
      cheating, embezzlement and theft at work as a by-product of competing
      ethical pressures.

      The reader is referred to the discussion of Panel 4 Issue C (under
      paragraph A, General, on pages 4-C-1 and 4-C-2) for further cogent
      background information.

B.   Defense Perspective: Ethical behavior is receiving widespread
      attention throughout government and the military, as well as industry,
      in terms of: political scandal; cost overruns; high contract costs.
      The military is addressing the problem through basic military train-
      ing, university pre-commissioning sources, continuing in-service
      professional military education, and continuous media publicity. The
      military environment is unique in that the soldier, sailor, airman are
      what home, religion, schooling, moral code and ideals of society have
      made him/her. Aggression, connected with the taking of life, is
      prohibited and unacceptable in society, at-large -- yet military
      service deals with the use of violence and, as a result, deals in
      killing. We are an individualistic society, yet successful combat
      units must have members who put their organizations ahead of personal
      desires. Military professional values and societal values may often
      fail to coincide (i.e., duty, honor, country, obedience, loyalty). In
      life and death situations these principles override desires of self.

The military, perhaps more than any other institution, depends upon public trust, and the public demands high principles and standards for its Armed Forces.

Military and civilian sectors are alike in one important way. The potential conflict between personal and professional ethics is resolved through effective leadership. A proper moral and ethical environment must be maintained by senior military officers and their industry counterparts.

C. Industry Perspective: It is a common contention that America's corporations are run by people who pressure their subordinates to act unethically, but survey results have shown that this kind of pressure is not so widespread as imagined. Less than three percent of stress from higher management levels has been characterized as "pressures to do unethical things." Over 10 percent of managers, however, reportedly have to violate their own personal ethics (Clinard, Corporate Ethics and Crime: The Role of Middle Management). It is logically inconsistent to insist on two codes of behavior from employees; and justifications and extenuating circumstances have proliferated in explaining deviant corporate behavior. More and more, though, industry is trying to appear less inhuman within its organization while on the outside it pursues aggressive behavior (corporate takeovers, less-than-scrupulous advertising and marketing). Emphasis may be wrongly turned to tactics of "damage limitation", where top management focuses on prevention of wrong-doing rather than correct behavior. Internal problems can arise in private sector organizations when "total" power is concentrated in the hands of a managerial class. Deviant ethical "guidance by example" periodically occurs throughout industry in the form of abused expense budgets, insistence on "perks" and special treatment. The implications can be waste, poor organizational relations, and effectiveness "disconnects" between management and the company workforce.

Future Concerns: An array of issues need to be considered:

- Is the answer to moral laxity more oversight and control? Or, can business and government foster responsible actions through the power of example alone?

- Should professional ethics be distinguished from personal ethics -- and if so, should the distinction be made clearer within an organization?

- The system of organizational rewards and incentives must be examined so as not to encourage unethical means. This is another form of management by example.

Desired Outcomes:

- Determine how management can best implement the precept that, within each organizational culture, a moral concensus and code of ethics should be aggressively followed. The resulting benefits in terms of

improved staff relations, reduced psychological pressures on people and "good press" as a result of running a clean operation may be greater than the costs of a less aggressive approach.

- Determine how prescribed standards of conduct can be made very clear and, in so doing, create a more cohesive and effective organization? Communication is the key to achieving a consistent code of behavior. Crossed signals or conflicting information (e.g., peer and corporate subculture pressures to pursue ethical and unethical means) are the mother of conflict. The standards of conduct must be made very clear, and doing so will create a more cohesive and effective organization.

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PANEL 4 - CHANGES IN ORGANIZATIONAL CULTURES

ISSUE C - RECONCILING INSTITUTIONAL AND PERSONAL VALUES IN A CHANGING SOCIETY

Statement of the Issue: How does conflict between personal values and institutional values affect organizational efficiency? How can these conflicts be reconciled in a changing society? What is the array of issues in which there can be potential conflict? Can the organization turn seemingly antithetical value systems into a plus for the organizational culture?

Background:

A. General: What is the degree of conformity necessary for a smooth-running organization and where can allowances be made for individual differences? A balance must be struck between the personal freedom that may breed the right environment for innovation, and the control necessary for orderly and coordinated operations. Certain worker groups, such as data processors, may not fit into the cultural mold of the organization and may have higher loyalty to their profession than to their employer. Middle-managers accountable to executives for these workers' behavior are faced with a dilemma. How can these values be reconciled, minimizing workplace tension? Other examples of the "company way" conflicting with worker idiosyncracies appear regularly in the press. Allowances for multicultural organizational environments are being made in many companies as are minor allowances in areas where regimentation or conflicting value systems result in staff demoralization and/or productivity decline.

The impact of changing societal values upon the personal values of the individual is particularly important in this day and age. The Washington-based Ethic Resource Center addresses the issue this way: "Corruption is in the headlines daily -- stories and scenes of sleazy ethics, bribery, kickbacks, arson, vandalism, burglaries, shoplifting, and countless forms of dishonesty and violence. News editors have learned to anticipate the space or time needed to reveal the latest in corruption. If it isn't one charge, then it's another; under every stone, there is not just one worm, but an infestation. What is worse, as Thomas Paine recognized, is that we tolerate it! We have come to accept the fact that, if given a chance, all too many Americans will cheat, whether they are high school students, film executives, or often-tempted purchasing managers. We accept the necessity of triple-locked doors and the risk of being hit on the head if we walk the city streets. We accept lies from the repairman and the chairman of the board, all as a matter of course, as an institutionalized habit of the times. We accept lies from the government. And the corruption of politicians is so pervasive it has ceased to be a comedian's joke. Thus, we condone it all. 'That's politics,' we cavalierly say. Why do we tolerate all these destructive acts? First, many of us are personally involved and are profiting by dishonesty and corruption.

Second, many of us are weak or apathetic. We're afraid to take courageous, positive steps to stop these raging rip-offs. Third, too many of us have no values other than money. Fourth, a large number of us seem content in the belief that as long as we observe reasonable ethical standards, we do not need to feel responsible for the conduct of others. We do not see that reducing dishonesty and corruption has anything to do with the preservation of economic and political freedom. Perhaps we do not place much value on freedom anymore. As Vermont Royster observed, 'It is not so much that people are consciously immoral; rather they are unconsciously amoral.' Finally, there are those of us who simply do not believe corruption is all that bad. We have lived with it so long, it's beginning to look all right."

B. **Defense Perspective:** Matters of personal versus institutional values are receiving some study in the all-volunteer military. The ethical standards of the military are understandably rigid, placing commitment before personal gain. While private industry is responding to the career demands of professionals, generally viewing jobs as career stepping stones, the career demands of professional military personnel appear to be more closely allied to institutional goals. In the military, there is some surveyed disaffection with ethical standards; particularly noted were "problems at the top", with as high as 58% of officers in one survey responding that more scrupulous adherence to ethical standards is needed. The Armed Forces have performed numerous studies to determine where and how extensive the differences in personal and institutional values are. Incorporation of these analyses into professional military education and training programs is one example of how formal survey results provide the basis for constantly adaptive personnel management while preserving the integrity of institutional goals.

C. **Industry Perspective:** Differences in personal and institutional values can cause the failure of well-defined organizational goals and objectives. Instrumental in setting the moral tone for a company are top management people, according to one survey. Many organizations have consequently become more sensitive to the impact of corporate officers' behavior. Since top management expects its employees to adhere to certain institutional standards, it is making certain that those standards are clearly communicated. When these attempts fail it is possible that some "distance" lies between those making decisions and those expected to implement them; such disparities in values can be exacerbated by societal trends that emphasize personal achievement over institutional loyalty. Many managers are finding it difficult to obtain commitment from their workers because they are more dedicated to their occupational field than to the company's goals and objectives. Existence of "specialist subcultures" within organizations contribute to competing on-the-job socialization experiences which tend to absorb the loyalty of new employees. Organizations, recognizing that they perhaps cannot change the personal and subcultural value systems within, are seeking ways to tap the positive aspects of these diversities.

<u>Future Concerns:</u> An array of issues need to be considered:

- How will the changing values of young professionals affect the performance and internal discipline of government and private organizations? Will a new corporate multiculture be more open, and possibly more innovative? Will a diversity of value systems operating under an umbrella of organizational culture contribute to a *bureaucratic* sclerosis, a quagmire of short-termed planning approaches?

- Computer technology and office automation has dramatically reduced the time needed to perform traditional office duties. How could this extra time be devoted to human resource development? Will such an allocation of resources to the human resource issues really solve these problems?

- Predicted shortages in skilled labor may give workers in these fields more flexibility in the area of their personal values -- being able to assert themselves and insist on a differentiated "value environment." In a more competitive hiring environment, companies may be required by market forces to offer enhanced freedoms for personnel within a more flexible corporate culture.

- Will certain business, government and military practices that have been described as unethical be increasingly subject to worker review? Have these internal conflicts, real or perceived, been detrimental to staff morale?

- Choices can be made to either project a stronger institutional value system, under which all employees and managers would operate, or accommodate to minor differences in personal and institutional values. Petty differences with performing a job "the company way" are rarely a compromise to organizational performance and are better overlooked. Quality of life workplace improvements are at the heart of such moves.

- One significant institutional culture issue that affects the decision process is the degree of congruence between stated institutional values and extant operating values as reflected by the organization's policies, rules, and procedures. In specific cases where a degree of disparity exists, individuals may be required to make decisions which may not be fully in consonance with the stated institutional values.

<u>Desired Outcomes:</u>

- Determine how management can best identify the most effective strategies to deal with conflicting value systems; these strategies can range from working around the problem to defining and fitting a suitable value system. The right strategy choice will depend on top management's commitment to finding a solution. Identification may be the first and most difficult step.

- Determine how management may best survey its own organizational culture and concurrently recognize/identify the prevalent value systems of key managers. The survey should be designed as a helpful means of devising a planning system that will take into consideration

potentially harmful differences. Social and behavioral science research methods can be employed by managers, using the growing body of research on the subject.

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APPENDIX 5

PANEL 5 REPORT: DEVELOPING CAREERS

PANEL 5

DEVELOPING CAREERS

1. **INTRODUCTION:**

Panel 5 was chaired by Mr. David A. Weeks, with Vice Admiral William P. Lawrence as the assistant chair. Table 5-1 lists all Panel members as well as recorders and observers, together with their respective primary private or public sector affiliation.

The Panel chair emphasized that the exchange of ideas between the public and private sectors is a bold attempt to bridge "sector walls" that prevent the open and free exchange of ideas. To the extent that those walls are breached, all concerned can benefit from shared experience -- both positive and negative. Career development promises to be a high payoff area for intersector networking.

After introduction of each Panel member, the chair set the tone for the Panel discussion by encouraging non-directed, open exchange of ideas on a non-attribution basis. While he emphasized that the Panel should not expect to solve the problems found during discussion, the chairman was enthusiastic about taking a first step down the path to an on-going dialogue between the private sector human resource executives and their military counterparts.

TABLE 5-1

PANEL 5: DEVELOPING CAREERS

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2. **ISSUE TITLE**: Career Path Planning: How Is It Done?

    a. Viewpoints:

        Approaches to career path planning vary from highly formalized structured approaches to decentralized "coaching" programs. How organizations plan careers depends upon situational factors such as mission, goals, organizational culture, environment, etc. No two organizations should expect to have the same system. Though many career development problems are common to most organizations, the uniqueness of each organization requires tailoring the career development system to meet its particular needs. This diversity of systems and ideas increases the potential for finding something useful by exploring other organizations' approaches to common problems.

    b. Discussion:

        Formalized career planning systems develop careers in fine detail. Often the planning process is aided by computerized succession planning systems which accumulate recommendations about who should be given which job. These structured programs frequently specify career milestones including particular positions as well as preferred training courses and schools for professional development. As programs become more elaborate and formalized "square-filling" becomes a danger. "Fast-trackers" who move quickly from job to job on the way to the top may learn little from a position if they are not in the job long enough to see the results of their efforts. Accountability for performance reinforces those things that the "fast-tracker" does well and helps identify and correct weaknesses. At the other extreme, organizations with unstructured programs, select candidates for promotion at the time positions become available. These

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organizations rely primarily on "mentors" and networks. When managers know their people well and positions are well advertised, these can work quite well. They risk overlooking the best candidate and neglecting long-term objectives of career development. Their effectiveness depends heavily upon the comprehensiveness of their mentors' networks. A third type of career development combines characteristics of both the formalized approach and the less formal "coaching" systems. The third type decentralizes responsibility and authority for career development. These plans can be quite formalized in one division and less formalized in another. Corporate headquarters typically provide only general guidance, but require quality results.

A final concern was that many companies foster high career expectations even though only a few can ever reach the top. Opinion was mixed about the organizational impact of the many who aspire for "fast track" careers, but fail to achieve their ambition. Some Panel members held that the costs were very high since most employees eventually believe they have failed when they miss a goal such as "Vice-President by age 30". Without rapid expansion of the organization, widespread career disappointments will occur. Prevalent career disillusionment impedes organizational effectiveness and complicates the leadership tasks of senior management. Inflated career expectations contribute to careerism (square-filling). An alternative approach to inflated career expectations is to develop realistic career expectations which emphasize performance in one's current job instead of advancement. By emphasizing performance and the importance of rewards other than promotions (bonuses, recognition, etc.), organizations can foster realistic expectations and avoid the disfunctional consequences of career disillusionment.

3.   **ISSUE TITLE:** Planning Senior Management Succession

a.   Viewpoints:

Senior management succession is handled in as many ways as there are corporations. There are two basic options, promoting from within and filling from the outside.

b.   Discussion:

In the private sector, planning for high level managerial succession is a difficult challenge. Factors that contribute to the difficulty are leadership style, foreseeing what kinds of leaders will be needed in an uncertain future, the impact of technology and innovation on jobs, corporate restructuring, and the economics of supporting an adequate pool of of in-house talent. The problem does not exist in the DoD arena because the uniformed services are promoted from within. However, even among the services, there was discussion about career paths to high level leadership roles. Each service annually selects new senior leaders, but the criteria used for selection varies across services. In that regard, the military and the private sector were similar in that selection, indeed the career paths that led to selection, were unique to the organizational culture. New paths are appearing and old paths are becoming more complex. The question of generalist vs technician was discussed, but must be resolved on a case-by-case basis. While sharing concepts on "how to" select (for example the methodology of how to effectively rank competing criteria) might be beneficial, the "who to" select was of less common interest.

c. Resolution:

The Panel explored a wide range of selection models including a demonstration of new Army software designed to assist the decision-maker in the selection process.

3. **ISSUE TITLE**: Identifying Potential Candidates for Training, Broadening and Leadership

a. Viewpoints:

While no consensus was achieved on the best ways to select potential candidates for training and future leadership positions, the following points were discussed. In the military, training is provided on a large scale basis and is usually designed to prepare a member for his next assignment. Advancement within the military is determined primarily by past performance and potential as reported in performance evaluations. In the civilian sector, firms have various methods of selecting future leaders through a variety of performance systems. While the degree of complexity in performance systems varied considerably, all systems were concerned with reporting current performance and future potential. A high portion (80 percent) of the training conducted within the civilian sector is in the form of on-the-job training.

b. Discussion:

Military personnel evaluation systems were identified as the primarily vehicle for determining which member would be selected for positions of increased responsibility. The major problem associated with performance

reports is the tendency to become inflated over time and hence lose effectiveness as a selection tool. The Army's system appears to be less affected by the problem due to control measures which "rate the rater". Career paths within the military tend to be fairly rigid and highly structured. Concern was expressed by military members that the present selection and training required for officers pushed them through jobs too quickly. Appraisal systems within the private sectors make use of MBO techniques to a greater extent than the military. In addition, these systems are often decentralized among the divisions of a large corporation. The MBO process coupled with mentoring is used to evaluate candidates and groom the best for future leadership positions.

    c.   Resolution:

The use of computer system to evaluate candidates for promotions and selection for training was discussed. This area is one which was felt to have potential and worthy of further research. Several branches of the Service already have system in effect and are continuing to develop software programs. The private sector is also a heavy user of such systems. Great interface of military and civilian training programs was viewed as an area for future examination.

5. PANEL CONCLUSIONS:

    a. The Panel addressed a wide range of career development issues in addition to those discussed above. Many were discussed only briefly, but were important none-the-less. These issues were:

(1) Careerism -- is it detrimental to job performance? The consensus was that it diluted performance because it continually fostered planning for job moves, and the inability to learn and be productive fast enough before the next move up the organizational ladder.

(2) Women in the organization -- the impact of both spouses working. Dual career families will become a growing issue for both the private sector and the military.

(3) Impact of decreasing pay and retirement benefits in military -- erroding compensation will affect retention and recruiting. Even the perception of pay and benefit losses have negative impacts. The problem is complicated by the Services limited control over compensation and benefits issues which are decided by Congress.

(4) Management training -- should it be done in-house or outside? Consensus is that the trend is toward more in-house development in both the military and private sectors. The desire to customize training as well as budget constraints were cited as the principal reasons for this change.

It was clear that the Panel membership shared a common bond of interest in discussing not only their own specific areas of expertise, but also in learning from fellow Panel members. The enthusiasm and obvious

professionalism brought to the Forum and the commonality of problems and issues made clear the need to establish some form of on-going dialogue between the public and private sectors.

b.   Several potential methods were discussed in order to promote the future exchange of ideas not only in the area of career development, but in other areas as well. Use of an electronic "bulletin board" was discussed, but experience has proven that a bulletin board can be overwhelmed if access is not controlled. What the Panel did agree was that the Air Force Human Resource Laboratory would update the available career development information on a quarterly basis. In the update, each Panel member would report on what they are doing (conceptual, experimental, documented or undocumented) in the area. The Conference Board will distribute. It was also proposed that additional in-person contact be made using a variety of formats that will aid in the exchange of information and help participants evaluate their training and development programs.

PANEL 5 - DEVELOPING CAREERS

ISSUE A - CAREER PATH PLANNING

Statement of the Issue: Why is career path planning getting renewed attention?
What are its benefits as a recruiting tool and retention device? How can a
well-articulated career development model improve staff relations and
performance?

Background:

A. General: The men and women who constitute the "baby-boom" are now
contending for many of the same mid-career level jobs, and
consequently even the most talented and motivated are finding their
careers on plateaus because employers are ill-prepared to respond to
their demands for job satisfaction and advancement. So, in order to
hold talented individuals, organizations have begun to reeva. te
their career development programs and have generally opted for a
strategic approach that remains responsive and flexible to individual
needs while retaining a somewhat predictable, managable form. Manage-
ment has been trying to provide visible support of their program,
teach awareness, promote volunteerism and encourage initiative b
offering incentives. Career development programs require some
structural changes, where necessary, to assure effective communica-
tions between promotion candidates and managers, monitor and measure
performance, receive and process feedback, adjust compensation
structures to provide more incremental response, and create innovative
incentives. More emphasis is being given to lateral movement and
training so that employees will have a wider range of options within
the organization. This approach also seems to combat the .ver-
specialization that has concerned many organizations, by exposing
employees to more of the organizational functions. Where once
informal individual career path planning was the sole accepted means
of preparing for personal advancement, formal structural arrangements
are being devised to complement them, addressing any deficiencies that
seem to be arising out of modern career expectations.

B. Defense Perspective: Career path planning and development,
particularly that of officers, is intended to fulfill the objectives
of both individual and organization. The primary purpose of career
management is to ensure that qualified officers are available to
accept responsibilities within the defense establishment. In doing
so, the military must balance the desires of individuals with
personnel staffing objectives. Each candidate is in an environment
which utilizes rotation of assignments as a tool for identifying and
developing their capabilities, and thus ensures equality of
opportunity in competing for those positions. Adequate information
is made available to allow each individual to plan a career
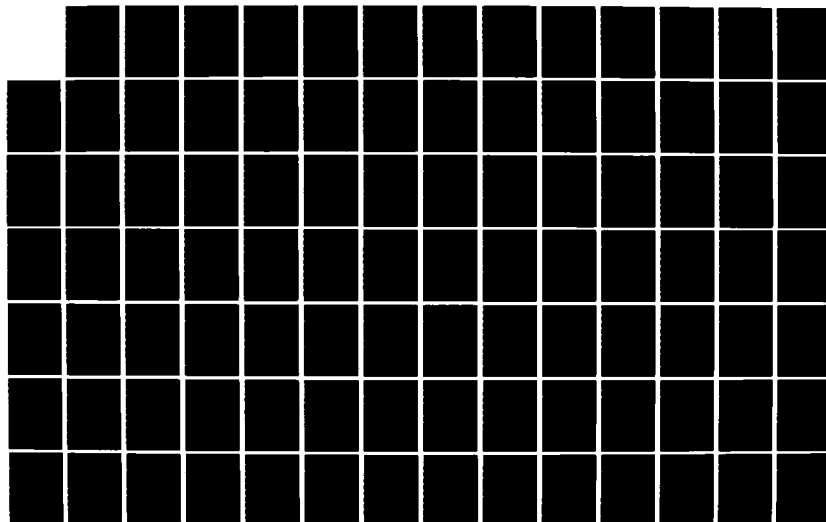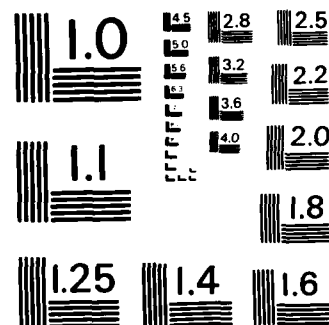realistically. To aid this process, each officer's career plan is

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developed through the combined efforts of the individual, supervisor, commander, major command and headquarters staff. Although career development occurs independently at all levels (and is encouraged), it must function under the guidance of an overall management system. Centrally-administered career development programs exist in all the Services; they interrelate the various educational, training, utilization, and sustainment actions that affect executive development. Programs generally offer guidance to the lower echelons through the assignment subsystem, designing career progression patterns that show time for movement through education and training options and assignment levels. Career management teams have been used, as at the headquarters level, to ensure that officers with high potential are taking advantage of available career development opportunities.

C. Industry Perspective: Career path planning has been used to address the demands of a more mobile and competitive workforce, and has been a key planning tool in corporate growth strategy. Also, by providing highly visible management support for lateral moves and advancement opportunities, this in itself has proven to be a useful motivational and retention tool. Careers are kept dynamic by adjusting compensation structures to permit salary grade changes (without requiring major title alterations), restructuring incentive award programs so that they reflect employee performance as well as the forces of the labor market, using early retirement incentive plans to accelerate the normal attrition rate of older workers and open up management career paths. As previously mentioned, in-house education and team projects support the alternatives of lateral movement. Not all of these options which have been exercised in the business world are universally applicable. Improper and poorly-planned implementation of such programs can lead to higher turnover rates and wasted funds for training and development. There is also the problem of recognizing too many candidates for advancement. While continuing to offer incentives for upward mobility, coordination is needed to avoid staffing catastrophes and unproductive managerial spans-of-control.

Future Concerns: An array of issues need to be considered:

- In light of the aging workforce and the predicted labor supply shortage of the next 10-15 years, what will be the role of career path planning as a device to accelerate the advancement of high-potential, talented individuals into vacant positions or understaffed areas? Will this become a factor in recruiting?

- Since job mobility is a primary consideration for human resource managers when hiring, how will an increased emphasis on career development and planning affect the desire to move on, professionally?

- What are the managerial costs of a centrally-planned career development program? Can cost-effective programs address most individual needs?

- Can visible management support for employee career goals generate a measurable improvement in morale, productivity, and turnover? On the other hand, what pressures and expectations are implied with such programs? How do underachievers react to career-oriented environments and emphases on constant advancement?

- Can careerism, or a declined interest in performance in favor of advancement, ever result?

Desired Outcomes:

- An accommodation of individual amibitions within organizational objectives requires a much more institutionaled approach to career development. Such a program's interrelationship with other human resource aspects like recruitment, education, training, and overall planning makes for a regularized, visible channel for reconciling these often divergent goals.

- A constant reevaluation of objectives and open channels of communications are necessary for any program to realize its goals. Career path planning requires participation of the individual, who must feel that some outcome is achievable. Adequate contacts and counseling are needed at all levels.

- Uncertainty of one's future in an organization should reflect in performance. At minimum, career development models will communicate the needs and culture of the organization, account for desires of the employee, and predict how these can be mutually compatible or even supportive.

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PANEL 5 - DEVELOPING CAREERS

ISSUE B - IDENTIFYING POTENTIAL CANDIDATES FOR TRAINING, BROADENING AND
LEADERSHIP

Statement of the Issue: Training, broadening and career development are
essential to the maintenance of organizational capabilities, readiness,
cohesion, continuity and standards of performance. What are the ways in which
high-potential candidates for leadership can be identified? Do the best
prospects exhibit typical characteristics or behavior?

Background:

A. General: The assessment of a person's potential, determining whether
he or she will respond to training and additional responsibilities, is
an elusive process. Many organizations have sought objective,
institutionalized means of training, educating, broadening functional
experiences, and effecting management succession, with varying degrees
of success. To combat stagnation of managerial talent and revitalize
management, an organization must make a commitment to develop existing
human resources in ways compatible with financial resources and
managerial objectives. The process involves tracking potential
candidates through various performance situations and environments.
Review of previous records, performance in training and on the job,
and the use of staff surveys have served as evaluation tools. A
concerted effort to promote development of in-house talent
simultaneously addresses the requirements of organizational and
individual development while creating visible, well-defined (ideally)
advancement criteria. Within the general framework of training and
development, programs designed to identify and review high-potential
candidates are gaining importance in light of rapidly changing
technology and recent demographic trends (particularly the aging of
the workforce and increased job mobility) which present profound
challenges to both industrial and military organizations.

B. Defense Perspective: The military requirement for training is derived
from the need to replace losses in each skill currently required in
the structure of the Armed Services and to provide knowledgeable,
well-trained personnel to meet future requirements. Training programs
are designed to insure that skilled and motivated personnel are
available to carry out all tasks and functions in accomplishing the
mission. These programs as a whole provide an indispensable foundation
for readiness. In terms of manpower, money, and facilities, education
and training programs are one of the most expensive phases of military
operations. The amount of training provided and the associated
resources required are subject to intensive critical reviews in the
budget authorization and appropriation processes. The unifying
themes of all levels of review are to insure the validity of require-
ments and to provide sufficient resources to meet these requirements.

All training programs must be continually assessed in light of current and future requirements to insure adequate numbers of qualified personnel are produced at minimum costs. In an effort to reduce training expenses the Department of Defense must continue to be a leader in the development and application of advanced training technology. Recent innovations in structuring training programs and in instructional techniques, such as utilizing computer-assisted and programmed instruction methods, simulators, and the Instructional Systems Development (ISD) approach to training, have served to improve the effectiveness of instruction, reduce the time required for courses, or both. All training managers must maintain active liaison with other Services, civilian education activities, and industry.

Implicit in candidate tracking and development is career development. Where once this took place informally within the organizational structure, it was reasoned that because of increasing technical complexity and sophisticated management needs, formal career development programs should be instituted in all the Armed Services. Although these planning mechanisms and central career development bodies seek to match qualifications to requirements, there are numerous opportunities for individuals to exploit their own intellectual and professional skills through command, educational opportunities, and changing tours of duty. The military meets its staffing needs for talented managers, technicians and engineers almost exclusively by bringing high potential groups up through the organization in a "closed" personnel structure. Since military salaries are inflexible, the Services promote the opportunity enjoyed by qualified military members to develop management and leadership skills at a young age. A long-term professional growth program in the Navy has maintained a stable, well-qualified engineering workforce even in the face of shortages throughout the private sector. This has been accomplished through cooperative arrangements with universities and industry, an aid program, and engineers-in-training. These programs also provide a solid baseline for developing and evaluating potential leaders.

C. Industry Perspective: Beyond its advantages in terms of organizational control, corporations are finding that career development is becoming an essential strategic element if they are to be responsive to changing technology and retain talented personnel. It has been noted by human resource and productivity specialists that employee performance is improved when the opportunities for advancement exist, and when an environment exists in which an employee can respond and use his/her own initiative and imagination. Certain companies have also simultaneously created a management development tool. The varied functional environments that exist within any business can serve as the best training and breeding ground for new managers. Tracking high-potential candidates by recording their initiatives and activities as well as the time spent on them is one way to recognize talent early and make cost-effective training and leadership choices. Radical job moves (one of the more experimental methods of identifying potential leadership used by some British companies) involve a change of function or transfer to a subsidiary. The intent is to expose managers to the widest possible range of functions, combat parochial or specialist thinking and develop a sense of loyalty to the entire organization. Identifying management orientations and leadership

styles is another outcome of such programs, allowing career planners to match personalities, temperaments, and qualifications to organizational requirements. Corporations have tried to achieve these goals with centralized "assessment centers," independent of or parallel to informal, individual, subjective reviews. The one general observation noted: the criteria are highly abstract when it comes to merging individual and managerial requirements.

Future Concerns: An array of issues need to be considered:

- How will the expenses associated with retaining talented managers through career development programs impact upon an organization's budget? The recent focus on productivity and trends in workforce demographics will increase the salience of career development.

- What effect will computers have on monitoring and tracking potential leadership candidates? At least one armed service has computerized "task analysis." Is this highly qualitative task poorly suited to computerization? Is there a potential for abuse and a subsequently negative impact on morale?

- What motivation will organizations have to develop in-house talent with so many people pursuing individual career development and job mobility?

- Can the military develop its talent base and attract more qualified people with clearly-defined career programs alone?

- What are problems unique to the military in identifying, training, placing and retaining personnel? Are military leadership requirements any less flexible than those in the private sector?

Desired Outcomes:

- Enhanced ability to maintain and use in-house talent may not only benefit the organization in terms of control and continuity, but can also contribute to morale. A well-defined career advancement program is a useful motivator.

- Older theories concerning leadership styles and managerial stereotypes are quickly becoming outmoded, although the pressure to be a disciplined generalist still remains. How will increased organizational diversification change the ideal manager? Is there one?

- Increased job mobility may be an indicator that employees are not achieving expected career goals or are not offered enough advancement and enrichment opportunities at their own jobs. Is this a deeply-rooted social phenomenon? Why do Japanese employers retain their people for a lifetime; where do cultural factors cease to explain the difference?

- Institutionalized career development programs are needed to address the training-retraining problems of the high-tech age. An integrated approach to these human resource issues should be taken where applicable.

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PANEL 5 - DEVELOPING CAREERS

ISSUE C - PLANNING SENIOR MANAGEMENT SUCCESSION

Statement of the Issue: What are the problems associated with senior management succession? How can improved planning avert potential crises in authority? What are the factors that contribute to the failure of succession planning?

Background:

A. General: Advanced organizations generally are aware of the costs involved in provisional solutions to top management succession crises. Vacancies in these positions can create a vacuum of authority even after a successor has been chosen. Insufficient preparation of high-potential candidates can be directly detrimental to organizational performance, stagnate decision-making, and create an atmosphere of confusion. Planning for succession, at minimum, takes stock of an organization's own resources before funds are spent on outside searches, and gives internal candidates a fair chance at openings. Effective planning can avert the morale problems and discord resulting from provisional arrangements effected as stop-gap measures. These considerations are acquiring increased importance in selected highly competitive industrial sectors in which retention of managerial talent is a growing problem. In terms of overall organizational efficiency, quicker and more efficient succession transition is increasingly important given the trends in office and communication technology. These succession transition considerations could in future affect a growing number of organizations, including those of smaller size.

B. Defense Perspective: The element of leadership is central to military organizations. A highly institutionalized mechanism has always existed for promoting high-potential candidates to senior positions. Qualitative issues, however, have at least the same importance in the military and at top Federal civilian echelons, as they do in the industrial sector. In the application of modern behavioral and social science technique, selection criteria have tended to focus less on traditional, intuitive judgment and more heavily on concrete technical and analytical abilities -- some more traditional concepts of leadership have changed. The technological explosion has imposed new demands on top leadership candidates, requiring a broad base of knowledge to assure that basic functional decisions can be made. These issues have direct relevance in ever more technologically advanced Defense organizations.

C. Industry Perspective: The more seriously business examines senior management succession, the more it realizes the extent to which it is linked to management and career development in the overall field of

strategic planning. The major issues that arise in one management area impact all by virtue of the system's integrated nature. Depending on the industry, technical expertise, a grasp of all aspects of the operation, as well as working knowledge of the business function and the market environment are the central leadership selection criteria. A variety of techniques are being employed to develop internal talent and institutionalize a process for non-disruptive senior management succession. Some internal management development techniques increase workload on top managerial candidates to determine their capacities; they effect radical job or functional moves to determine adaptability and contribute to the candidate's corporate education; and they allow the candidate to experiment so that he/she finds out what area suits them best. The characteristics most cited by a recent survey of top US companies (Top Management Staffing Challenges, The Conference Board Research Bulletin, 1982) as requiring the greatest emphasis in succession planning are: (1) personal leadership style; (2) an aggressive, competitive outlook; (3) knowledge of business operations; (4) experience as a general manager; and (5) entrepreneurial flair. The question now posed, since many of the formal management succession plans are quite new, is what kind of leaders are these plans producing and do they meet corporate goals?

Future Concerns: An array of issues need to be considered:

- In some industries, a trend towards recruiting outside executives has emerged as fundamental changes in the industry occur requiring the appointment of executives with specialized training. What related forces are contributing to this trend? If a significant trend does exist, does it signal a deficiency in existing education and training mechanisms?

- Do outside executive searches disrupt business activity? What resources need to be devoted to coordinating them? How does outside recruitment impact on morale and perception of career development inside the company?

- How will the criteria for leadership characteristics and organizational background change with advances in technology? Will the ascendancy of technical specialists, as opposed to general managers, dramatically change organizations or create new leadership roles and functions?

- How can successions plans best be instituted and actually followed? What is required for these plans to win the commitment of top management?

Desired Outcomes:

- The potential for integrating management succession plans into an overall computer-assisted model for organizational development, needs study. Can such an automated review process lend itself to the unique decision-making processes involved in succession planning?

- Both the military and private sectors can benefit from further integration of management development, education and training, and overall organizational development. The demands and responses of these components can ultimately be linked through some institutionalized means, generating nearly instaneous response to organizational deficiencies.

- It is possible, given increased job mobility, that the use of outside sources for obtaining top managerial talent may continue to grow in popularity. An entirely new human resource market could develop, offering organizations immediate top management staffing to meet their required needs. This could be increasingly important in an era of rapidly changing technology.

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APPENDIX 6

PANEL 6 REPORT: MANAGING A LEAN WORKFORCE

PANEL 6 REPORT

MANAGING A LEAN WORKFORCE

INTRODUCTION:

Panel 6 was chaired by Mr. Arthur J. Reimers, with the Honorable Tidal W. McCoy serving as assistant chair. Table 6-1 lists all Panel members as well as recorders and observers, together with their respective primary private or public sector affiliation.

While the Panel was tasked primarily to explore "managing a lean work-force", we also looked at the means of achieving that lean workforce posture. In making its assessment, the Panel objective was to explore the issues, determine areas where a continuing government/private sector exchange will be useful, and identify the mechanism for sharing and the vehicle for future dialogue. Our concentration was primarily upon the management staff and levels of line management. While Panel participants agreed to deviate slightly from the issues as presented in the formal Issue Papers, there was general agreement the main Issue Paper points were covered in the discussion and this report.

Getting to a Lean Workforce

Conceptually, the movement from a current organizational structure to a "lean workforce" stru ture is a revolutionary process. However, implementation

TABLE 6-1

PANEL 6: MANAGING A LEAN WORKFORCE

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is an evolutionary process. As we look at the traditional organization, it is a very structured pyramid in which information flows downward.
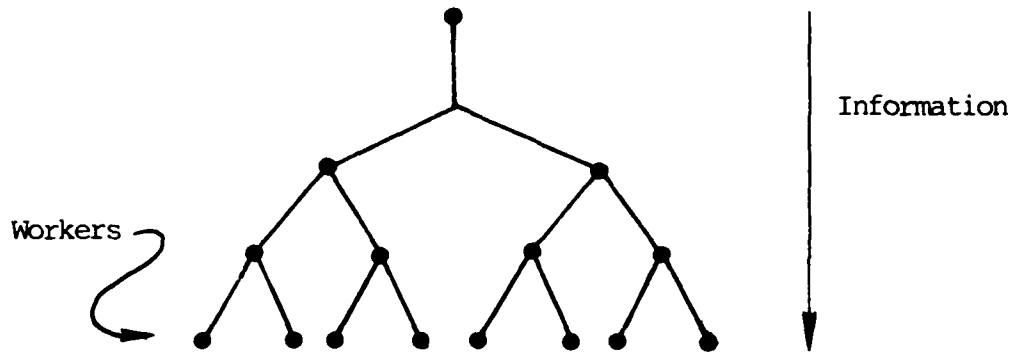
The traditional organization is "low risk" with a very well-defined chain-of-command and "Autocratic" philosophy that's based on strict policy, rules, and job descriptions.

On the other hand, the organization to manage a lean workforce is the inverse -- and much more participative.
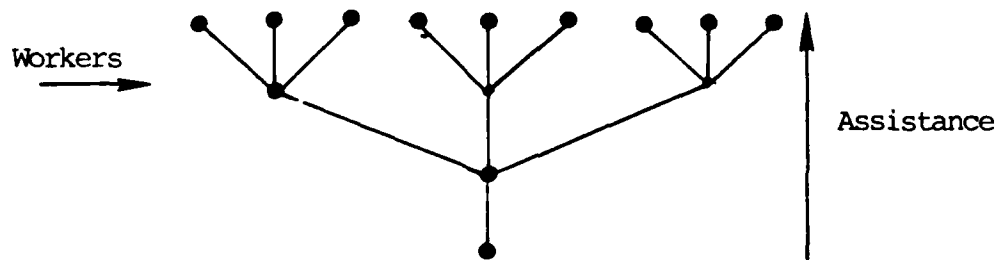
It has fewer layers allowing more time to be spent doing the function of the work unit. Less time is spent attending to the curiosity of those outside the work unit and answering questions from supervisory personnel (i.e., the CEO or his staff). The supervisor of the lean workforce supports the worker in an effort to remove the productivity stumbling blocks. The focus is more on getting the job done than on control. Likewise, there is a need for increased emphasis on organization effectiveness and on-the-job knowledge. It is a more "high risk" structure where the supervisor asks: 1) Do my line workers need my

staff's support? 2) In what way can I help my organization? 3) How best (better) can the staff serve my line team? 4) Does the staff enhance worker or organizational productivity? A feature of the lean workforce organization is this top down support. However, it requires bottom up understanding and support. Suggestions and participation have to start at the grassroots level in the workplace, fully supported by top level management.

The Government Organizational Structure

A Military Department dilemma, particularly in Washington, D.C., is an organizational structure that looks more like a Maltese Cross, with the Service staff at the hub.
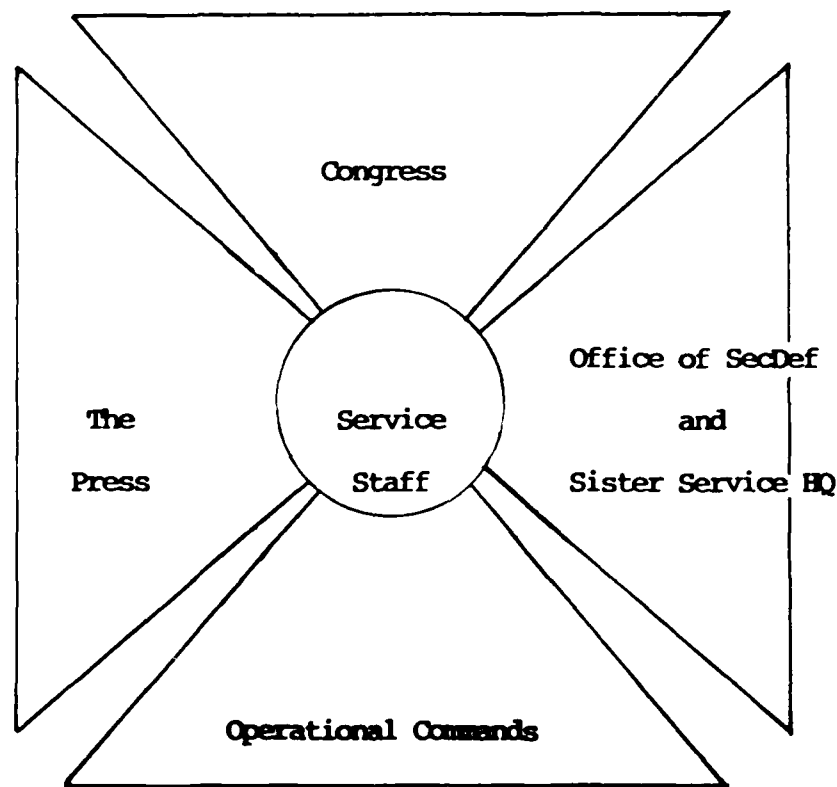
In this organizational structure, information and control flow in several directions. The key to further reducing Service headquarters staffs may be: a like reduction in detailed tasking and inquiries from Congress; less stringent

timeliness and detail standards than now applied in responding to press inquiries; a streamlining of Sister Service and OSD coordination processes; and a further delegation of functions to the operational commands. Related objectives are the avoidance of "layering" of supervision and functional responsibility, and improved staff quality through reduced turnover.

1. **ISSUE TITLE**: Careers Within the Down-Sized Organization. What is the Standard of Living? What is the Rate of Career Progression?

    a. Viewpoints:

A need exists to develop a clear career development orientation that addresses both career expectations and compensation. A key to retention of good people in the military organization is upward mobility. Panel members emphasized that those people who do not desire increased responsibility and are doing good work normally are not forced out of private sector organizations.

    b. Discussion:

Both the private and public sectors would like to "grow their own" leaders from within. The question is one of when and how to mark an individual for a particular track. Additionally, candidates need to be aware of the career benefits for "generalist" versus "specialist" career paths.

    c. Resolution:

In planning any large-scale down-sizing, the organization must address the interaction between (1) the grade distribution of billets to be eliminated,

(2) resulting impact on promotion opportunity and career attractiveness, (3) changes in career development patterns required, (4) complementary changes in retirement and compensation that may be appropriate, and (5) the utility and importance of positions for their training value in the case of government specialist/mobilization position requirements.

2.   **ISSUE TITLE**: "Curiosity" From Outside the Organization Fattens the Workforce

a.   Viewpoints: Private and public sectors agree that the need to satisfy the curiosity of those outside the organization requires additional time and effort that the manager can't apply to management and execution of primary workplace functions.

b.   Discussion:

As we trim the middle management staff without a commensurate trimming of information requirements, those remaining are expected to continue the information flow up the organization. In the public sector, especially in the Washington area, much time is spent responding to the press and to Congressional staffers. Too much outside "curiosity" about how everything is done keeps the management staff away from its primary functions. Senior managers want to know what's going on and be prepared to answer their bosses, the press, and Congress. General Welch emphasized this in his speech to the Forum participants on May 9, 1985, when he said: "Congress tasked DOD for 458 special reports in 1984 on top of over 1,300 appearances by senior witnesses before 96 committees and sub-committees totaling over 2,100 hours of testimony, along with 85,000 written queries and over 600,000 phone calls".

c. Resolution:

Make this subject an issue at follow-on private sector/Defense activities, and at the next Forum.

3. **ISSUE TITLE**: Across-the-Board vs Organized Cuts

a. Viewpoints:

All agreed that the worst way to reduce a staff was to make an arbitrary (i.e., 5%, 7%, or 10%) cut without regard to the relative importance of the functions to be performed. This is an outright admission of total management failure.

b. Discussion:

As we progress toward a lean workforce, we may need to allow the staff to participate in a zero-based review of the organization, with a view to giving up selected functions. The review must also include a look at activities and services which are not being done, and which could strengthen the organization if undertaken. A Panel member noted that in his company, five of 17 mid-level managers recommended their jobs be eliminated during just such a review. Lasting cuts come, it was thought, when a zero-based and prioritized functional review takes place. Otherwise, those positions cut will return to the organization in a short time.

c.   Resolution:

Down-sizing means organizations need to build muscle as they lose weight. Addressing the means of achieving that objective should be the subject of follow-on private sector/Defense dialogue.

4.   **ISSUE TITLE**: What is the Individual Manager's Role?

a.   Viewpoints:

Two views surfaced. One was that the effective individual manager needs to be a person with functional expertise performing management tasks. In the Civil Service, high grade engineers and scientists are often expected to be managers, yet many prefer to continue as specialists. The other view was that managers need to be generalists.

"Cautious optimism" describes the Panel's view regarding the Navy's recent decision to establish the Materiel Profession Program, in which some of the best and brightest staff corps officers, operators, and tacticians are "skimmed off" to become professionals in the Navy's weapon systems acquisition programs. Panel members agreed, in any case, that innovative methods for the education, training, and development of managers remain very important.

b.   Resolution:

Follow-on private sector/Defense dialogue should focus on definition of management functions and the qualification of managers in terms of both functional expertise requirements and the structure of the management task.

6-9

5. **ISSUE TITLE**: Management Information Systems

a. Viewpoints:

All agreed that the Management Information System is important, that the hardware can't out-distance the software, and that people are what make a management information system work.

b. Discussion:

Raw information is useless. On the other hand, refined information is power. A high priority is, accordingly, placed upon getting and effectively using information; top managers need that capability. Having that capability can require significant dollar and manpower expenditures.

Contemporary management information systems capable of rapidly processing and clearly presenting massive amounts of data, can lead to decisions being made at higher and higher levels of management, promoting centralization rather than decentralization of authority and responsibility.

Panel members agreed that effective management information systems must also include methods for management to effectively communicate policy changes. Both government and private sector representatives were particularly sensitive to the career force retention benefits of a good vehicle for downward communication.

c. <u>Resolution</u>:

Agreeing on the importance of effective management information systems, the Panel further agreed that the information system should be developed with a primary focus on needed rather than "nice to have" information. Special care should be taken to avoid cutting management information staff personnel until after the technology is available for the MIS to reliably refine raw data into useable, understandable, easily obtainable information.

6. **ISSUE TITLE**: *Incentives*

a. <u>Viewpoints</u>:

The government sector manager needs more monetary incentives to assist in "trimming the fat" and moving toward a leaner workforce.

b. <u>Discussion</u>:

The government sector provided few examples of the use of monetary incentives in moving toward a leaner workforce. One example, however, is the suggestion programs of the Military Services; the Air Force suggestion program, for example, saw 18,000 approved suggestions in FY 1984, with a 25:1 return, including 50 suggestions with over $1,000,000 in savings. While such incentives to motivate mid-level managers and lower level personnel to increase productivity and lean the structure are available in the government sector, few monetary inducements are available to incentivize senior officials who have the

"clout" to really make things happen. The basic compensation structure may require further assessment with a view to building-in the management-oriented monetary inducements which will encourage achieving a leaner workforce.

c. Resolution:

Follow-on private sector/Defense exchanges should take a look at public and private sector "good management" incentives. Establish the innate differences and parallels between public and private sector incentive systems, and then begin the development and application of improved incentive systems.

7. **ISSUE TITLE**: Contracting Out/Civilian Substitution/Part-Time Workers

a. Viewpoints:

Panel members agreed that when effectively used, these forms of down-sizing an organization could have good productivity and cost effectiveness results.

b. Discussion:

This topic was discussed primarily from the military perspective of carrying out Federal Executive Branch policy contained in OMB Circular A-76, requiring reliance on the private sector for goods and services properly the province of the private sector. Discussion centered on the experience of the military and civilian Panel members in contracting out selected services, primarily support services. One prevalent view was that further experience and measured outcomes are needed to support any increase in utilization of private

sector contractors and/or part-time workers. Others believed that expansion is justified based on currently available information. All agreed that competition among alternative modes of performing tasks and services, is paramount.

c. Resolution:

Experience to date suggests the general principle that one should attempt to introduce more competition, particularly in the performance of support functions, both between in-house and contract alternatives, and among departmental elements in the case of functions which must remain in-house.

PANEL CONCLUSIONS:

a. The benefits of this National Forum were unanimously agreed by all participants on the Panel:

1) The Forum reached its goal before the end of the first day. Members profited immensely from the generous and meaningful exchange of information and ideas.

2) Unanimous support was shown for the inclusion of Congressional staffers in future Forum activities.

b. The Panel agreed that future Forum participants should continue to be the highest level leaders of business, academia and the military. This provides the "top down" support so vital to current and future initiatives and exchanges.

c.   The Panel agreed that the next Forum should continue to concentrate on "Managing a Lean Workforce" as an area of interest. In this regard, case studies and additional examples of private sector and military efforts in down-sizing organizations, contracting out, and employing part-time worker and other support alternatives in managing a lean workforce, would be extremely helpful for future Panel study.

d.   Exchange of management personnel between the private sector and the military would be especially beneficial for military problem-solving in prime areas of Panel interest. Cummins Engine, Shumit Corporation, and Bank of America Panel members agreed, and government representatives concurred, that a personnel exchange program should be considered between private sector corporate staffs and the Office of the Secretary of Defense and Military Department Headquarters, for first-hand insights into their respective management methods and techniques in an environment of resource scarcity.

PANEL 6 - MANAGING A LEAN WORKFORCE

ISSUE A - CHANGING MANAGEMENT STAFF ROLES

<u>Statement of the Issue</u>: How appropriate is the traditional organization structure in dealing with contemporary problems? Is the acceleration of information technology eliminating the need for some middle managers? Conversely, is the complexity of large, technologically advanced companies too much for one "CEO" to effectively cope with?

<u>Background</u>:

A. <u>General</u>: The acceleration of change is best illustrated by the history of the endeavors of man -- who spent a million or more years in the forest, four thousand years on the farm, three hundred years in the industrial age, forty years in the electronic age, and is now passing through an information age which may last less than a decade. Leaders and managers are confronting truly new problems at such an accelerated rate that trade journals and professional magazines have often failed to keep pace with techniques and approaches to their specialties. Leading universities are restructuring MBA programs. The nature of the change within the management equation can perhaps be viewed as being in the same magnitude as the compression of electronic circuitry into the silicon chip -- intensive activity in a compressed area/time.

B. <u>Defense Perspective</u>: The concepts governing organizational structure of military organizations performing management staff functions have been largely unchanged since the 1940's. Those self-initiated changes which have occurred have tended to focus upon the exercise of more stringent operating control of important and costly functions and activities. For example, a variety of program management organizations have been established to more closely manage major resource consumption activities such as emerging weapons systems development; in most cases, these organizational elements have been established at a precedence level below the top management staff headquarters of the major elements of the several military services. Other changes in the management staff activities of the military services have been mandated by the Congress: these have consisted largely of mandatory reductions in the size of management headquarters, rather than changes in their structure (the latter being a statutory responsibility of the Secretary of Defense and the Secretaries of the Military Departments). As in the case of organizational concepts, the formal rank and grade structures for Department of Defense military and civilian personnel have been largely unchanged in recent decades, with notable exceptions (including establishment of the two top enlisted grades E-8 and E-9, re-establishment of the one-star rank of Commodore in the Navy, and establishment of the Senior Executive Service for Federal civilians). The duties and responsibilities of management staff incumbents,

however, have changed since the 1940's and more changes will occur as management challenges such as those mentioned in A, above, eventuate. Senior enlisted personnel of all Services have assumed responsibilities for increasingly sophisticated technology requirements. Technicians have entered the officer ranks to a greater extent than in the past, and managers/commanders must respond to new technical dimensions.

C. Industry Perspective: "Along with largeness comes complexity, unfortunately. And most big companies respond to complexity in kind, by designing complex systems and structures. They then hire more staff to track all of this complexity. . . . Successful companies avoid this in a number of ways each following a basic simplicity of form -- a product or unifying organizational theme which functions as an anchor or cornerstone around which they can reorganize more flexibly, frequently and fluidly" (from Simple Form, Lean Staff, by T.J. Peters and R.H. Watermen.). Within some prominent companies the role and identification of middle managers is changing, but the middle management arena remains the training ground for top management. The new middle people are "knowledge professionals," and their actions and decisions have a direct and major impact on the business, its ability to perform and its direction. These people are not "line" but neither are they "staff" in the conventional sense. Their function is not to advise, but to exercise operating control -- they have top-management impact, but not top management rank, compensation, or formal functional responsibility. Such changes are occurring in both the public and private sectors. Senior managers are increasingly concerned that they retain close control of these keystone positions, placing and grooming the people who assume these duties.

Future Concerns: An array of issues need to be considered:

- How should human resource planners be involved in this process of changing management staff roles? Do the military services have a different problem from that faced in the private sector?

- How does this transition impact on senior management? Are new methods of management control being developed of necessity and, if so, what are they?

- How does the "new middle people" concept affect management controls? Are loyalties and bonds being established outside of the "visible" organization?

- Is the evolving organization changing the manager career development sequence in the public and private sectors?

- Is this subtle transition recognized in MBA programs? How should managers influence that transition?

Desired Outcomes:

- A practical assessment is needed detailing the real-world changes in management staff roles necessitated by contemporary challenges and rapid technological change.

- Both the public and private sectors can benefit through establishment of a timely means of exchanging current information on changing management staff roles.

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PANEL 6 - MANAGING A LEAN WORKFORCE

ISSUE B - FEWER LEVELS OF MIDDLE MANAGEMENT

Statement of the Issue: Can cost be reduced and productivity increased by reducing the levels of middle management? If the answer is yes, where and how can this principle be applied? If the answer is no, where do we draw the line between excessive and inadequate levels of middle management.

Background:

A. General: Over the past 50 years, there has been a movement in organization theory away from the management principle of tight span of control (e.g. one supervisor for every 5 to 10 subordinates) and away from tight functional control imposed by middle managers at the principal and subordinate "headquarters" levels within the organization. The trend has been toward a reduction in direct supervision through broadened span of control, and toward management review based upon results. That trend is exemplified by contemporary principles fostering:

- Centralized policy control and decentralized execution.

- Management by objectives.

- Participative management.

- Decentralization of authority and responsibility.

B. Defense Perspective: Since 1968, the Congress has, by statute and legislative fiat, mandated reductions in the size of headquarters staffs. During the first half of the 1970's, the Air Force sharply reduced the manpower authorized at numbered Air Force and Air Division level, with those reductions concentrated in middle management positions. In varying measure, these reductions resulted in outright elimination of positions, with the balance of the reductions effected through consolidation of redundant common functions, and realignment of some functions (and some manpower) to both higher (major air command and Separate Operating Agency) and lower (wing, center, and field unit) levels. Throughout the 1970s and the first half of the decade of the 80s, there have been similar reductions at major air command, air staff, and Secretary of the Air Force levels, effected through the same combination of eliminations, consolidations, and realignments. Similar patterns apply to the other Services, the Office of the Secretary of Defense, the Joint Staff, and the Defense Agencies. In substantial measure, these patterns directly impacted the size of middle management staffs at principal and major subordinate headquarters. As the cost of manpower continues to consume in the range of one-half of the Defense budget, the pressure for lean

middle management staffing is expected to continue -- particularly in the near term as the Armed Forces seek increases in their aggregate manpower levels for the purpose of enhanced readiness and combat capability in the field.

C. Industry Perspective: As in the Air Force and the other Services, a growing number of private sector firms have focused upon the elimination of middle management positions with titles of "assistant chief", "deputy", "staff assistant", and comparable designations. Industry has also made a major effort to give the line manager greater freedom of action, thereby reducing the need for functional staff specialists at higher company headquarters levels. A guiding concept has been to reduce the layers of review between the production end of the business and top management. Industry efforts to reduce the plethora of government regulations which create the need for large numbers of compliance specialists at mid-management level and below, have enjoyed a measure of success under the current Administration. The introduction of increasingly large numbers of microcomputers (personal computers) into the corporate management structure has measurably enhanced mid-management productivity in such functions as finance and accounting, strategic planning, inventory and customer accounts management, and data and information management generally. In some companies, microcomputers have been the basis for mid-management staff reductions; in many others, micros have allowed existing mid-management staffs to keep pace with a growing business base.

Future Concerns: An array of issues need to be considered:

- What should be the future approach in industry and in government to staffing ratios at the middle management level?

- Industrial engineering methods (time study, "good operator" methods, and others) of determining manpower needs by function have been difficulty to apply to "brain-power" management functions, as distinguished from repetitive production functions. Can they be adapted to management manpower needs assessments using innovative computer modeling and simulation technique?

- What impact can the microcomputer be expected to have upon middle-management staffing levels when senior managers can directly access a broad company data base on all aspects of operations using their own micros, without the need for intermediary assistance?

- How can we identify the point at which middle management staff reductions reach a critical point of diminishing returns, and begin to adversely affect efficiency, product output, and return on investment?

- What has been the true impact of legislatively mandated, nonwork-load-related "headquarters reductions" upon Armed Forces readiness? How does one determine the point at which arbitrary reductions adversely impact efficiency?

- Are there significant institutional differences (e.g., distribution of power among management levels, scope and complexity of functions) between industry and the Department of Defense that result in justifiable differences in the number and levels of middle management required?

Desired Outcomes:

- Industry case studies detailing methods and techniques employed to exploit new technology (office automation; microcomputers) in maintaining lean middle management staffing ratios.

- Comparison of policy outcomes in government and industry governing such matters as "Number Two" positions (i.e., staff assistant and deputy positions).

- Industry case studies demonstrating successful application of industrial engineering manpower needs assessments to headquarters-type management functions.

- Potential for application of statistical analysis techniques for determining acceptable ranges of middle manager-to-production staffing ratios in industry and government.

- For the private sector and public sectors, determine potential for changing institutional differences that result in added management levels in one sector, based upon actual experience in the other sector.

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PANEL 6 - MANAGING A LEAN WORKFORCE

ISSUE C - CONTRACTING OUT/CIVILIAN SUBSTITUTION/PART-TIME WORKERS

Statement of the Issue: Depending in part upon fiscal considerations, and in part upon the purposes and innate capabilities of given organizations (government and private sector), certain tasks are suitable for performance by part-time workers, and some tasks are more efficiently and economically performed by contractors. Although significant savings may be realized by these means in appropriate circumstances, in what circumstances are these labor substitution alternatives inappropriate or infeasible? Is the reluctance to use civilians in some areas of the military based on outdated or invalid assumptions? Can these incompatibilities, real or perceived, be resolved?

Background:

A. General: In public and private sectors alike, human resource costs have attracted prime managerial energy to bear on ways to increase productivity. In many instances, this is achieved by reducing the workforce for a given amount of output. To maintain output, managers employ new technology, institute new work methods, employ more skillful workers, or resort to one of the labor substitution sources. In the latter category, employing a contractor to perform certain functions can be less expensive than using in-house labor sources when: contractor compensation and benefit levels are lower than in-house; or contractor labor skill and output levels are higher; or contractor economies of scale and overhead costs allow lower expenditures per unit of output; or unique skills are required only intermittently; or in combinations of these and similar circumstances. The alternative of using adequately-qualified part-time employees can result in lower cost per unit of output when intermittent or surge requirements must be met, or when fractional manning is necessary (i.e., given on-going tasks require man-day/month/year allocations in fractional increments) -- and because part-time employees often receive few if any of the non-cash benefits that are now a major portion of total compensation. These labor force alternatives can have some detrimental economic and labor side-effects, so that electing these options always requires some reflection on the part of management. Government employee unions are adamantly opposed to contracting-out; contract performance shortfalls can be more difficult to overcome than in-house workforce deficiencies; and contractor responsiveness may be sluggish when production needs change in unexpected ways. Part-time employees can lack organizational loyalty and may cause a loss of labor continuity that eventually can do harm in an organization.

For the Armed Forces, another available labor substitution option involves the in-house use of Federal civilian employees to replace military incumbents in proper circumstances. That option is addressed in paragraph B, below.

B. <u>Defense Perspective</u>: In March 1966, the then-United States Bureau of the Budget, since renamed the Office of Management and Budget (OMB), first released Circular A-76 detailing US Government policy mandating reliance upon the private sector for goods and services properly the province of the private sector, and outlining Executive Branch policy governing conversions from Federal in-house performance to contrast performance (and vice-versa). During the A-76 process, a government bid is prepared that is compared with the bids from private firms. If the private bid is lower than the government bid by more than 10 percent of the government personnel costs, the contractor is awarded the work. If the government bid is low, the work remains in-house, but must be performed at the bid cost which usually means with reduced, but more productive manpower. Government workers displaced by the A-76 process and reassigned or laid off. Winning contractors are urged to offer jobs to displaced government workers, but in practice these jobs are often at reduced wages. Whether the winning bidder of an A-76 bid is a contractor or the government incumbent organization, they are obligated to perform the tasks as set forth in a formal statement of work. How the work is performed, however, is up to the winner, so long as it is safe and legal and meets performance standards. In practice, A-76 contracting has a proven record of cost savings. Government bidders frequently lose, and for the most part contractors deliver on all specified contract tasks. Despite the proven record, the fact remains that individual jobs and significant resources are at stake in A-76 actions, and either employee unions or contractors, and sometimes both, protest the results of the cost studies which are a formal part of the bidding process. Some bases and units are exempted by their military mission, but often these determinations are hotly disputed. On occasion, emotionally-generated allegations of poor contractor performance and unreliability during mobilization have been made, while others accuse the military of protecting its own, of keeping a "good deal" going, of being paranoid about wartime, etc.

Substitution of Federal civilian employees for uniformed military has provided opportunities for reducing workforce costs in positions and functions not deemed military-essential. Unlike contractors, Federal civilian employees can perform "governmental" functions such as those inherent in the development of fundamental government policy, development of Federal budgets, execution of inherent governmental oversight functions, etc. They cannot, of course, replace military in combat, direct combat support, or other military-essential positions. In both A-76 contract conversions discussed above, and in military-to-civilian conversions, some authorities harbor lingering fears that contractors and civilians will decamp at the first hint of hostile action. Historically, civilians have been willing to go into war zones to work and have proven themselves reliable. This fact was demonstrated in both Korea and Vietnam where there was rarely, if ever, a shortage of civilians to serve in hazardous areas. The Armed Forces now employ civilians to install, operate, and maintain this country's defense

systems, communication systems, ADP facilities, and other highly technical support systems. This reliance upon civilians is properly a matter of concern among military commanders, who must have assurances that these essential civilians will continue to support the military forces if the likelihood of war increases or if a conflict starts. The Department of Defense (DoD) has studied proposals for assuring civilian retention ranging from contractual arrangements and agreements to compulsory military affiliation. The most acceptable method was determined to be incentives (rather than penalties) in conjunction with signed agreements to remain on duty.

In the matter of part-time employment, there has been little emphasis on such alternatives because of the nature of defense functions. In the matter of temporary employees, however, new authority was granted as recently as January 1985, to make and extend temporary limited appointments in the Federal civilian service. Under the new authority, an agency may hire personnel to perform not only temporary work but also to do work of a more permanent nature in situations deemed appropriate by the agency.

C. Industry Perspective: When used as an announced policy alternative, the "threat" of contracting-out can have a significant internal impact. At a Honeywell defense plant the janitors were scheduled to be replaced by a contract service which would have reduced costs. Before a contract was let, the janitors formed a "quality circle" (for formal participative workplace problem-solving); the group elected to forfeit one job, to perform certain tasks less often, and trim supply costs. By their efforts they under-bid the outside sources and trimmed costs for the company while maintaining satisfactory service. Employment of part-time workers, where unions do not interface, is a valuable tool for matching a workforce to changing or fractional needs. In fragmented situations (e.g., banks with hundreds of branches), part-time instead of full-time position manning can reduce manpower requirements by scores, or even hundreds of positions.

Future Concerns: An array of issues need to be considered:

- Are the Services now employing the most cost-efficient mix of military, and Federal civilians, and contractor workforces?

- In "civilianizing" and contracting-out military support activities, has the Department of Defense created a war machine with limited performance capabilities in a partial mobilization? In a total mobilization?

- What additional accommodations should be made for employees who are displaced when a function "goes contract"? Are there ways to mandate continued equivalent employment of these people? Can their valuable skills be retained even when contractors have no need for them? Should they be given more opportunity to "help" their employer in the bidding process?

- How can in-house labor and union opposition to contracting options be reduced, or even converted to support? Is there a better way to speed the joining together of labor and management in a mutual effort to improve American productivity levels and our nation's competitive posture in both the Defense and commercial arenas?

- What are the human issues that grow out of part-time employment and contract labor practices? Are there social issues that need to be assessed and manipulated in terms of their longer-range impact on the American workforce and the quality of life in the workplace?

Desired Outcomes:

- Guidelines for labor and management cooperation in matters such as contracting and part-time employment, in the interest of enhanced productivity, cost-effectiveness, and international competitiveness of the American workforce.

- Guidelines for, and recommendations for future study of optimal levels of contracting and civilian substitution in Defense activities.

- An assessment of the social and moral issues raised by all these methods of workforce trimming, perhaps through surveys and related studies, to prevent adverse long-range impacts on the national workforce.

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PANEL 6 - MANAGING A LEAN WORKFORCE

ISSUE D - DIRECT VS INDIRECT WORKER RATIOS; COMBAT VS SUPPORT RATIOS

Statement of the Issue: Industry and the military face a perennial need to reduce the resources which do not directly generate a "primary mission" product or service -- that is, one which directly contributes income to the bottom-line, or combat capability. Changes in technology produce new capabilities which force a constant reevaluation of such factors as what direct-to-indirect resource input ratios and, for the military, so-called combat-to-support ratios will be needed as technological changes are felt.

Background:

A. General: With notable exceptions, ratios of those who provide support to those who turn out products, provide services, or fill combat positions, have been reasonably stable in industry and the military in recent decades. Industrial engineers have applied rules of thumb in some cases, and strict standards in many others. The scientific management approach, in its prime, provided a theretofore missing balance between the tendency of management to reduce support too far, the desires of labor to provide more support as a job expander beyond available direct work, and the propensity of some line managers to expand support functions and tasks for the same level of direct labor. The military counterparts to industrial ratios, include management overhead and administrative support "tails". The size of these military manpower elements was raised a decade ago during extensive debate and negotiation over an amendment submitted by Senator Sam Nunn (D - Georgia). The debate centered mainly on support costs, including personnel, for US forces stationed in Europe as part of NATO. At that time, there was considerable controversy regarding alleged excess support. Ratio-related debates continue, and there remain current issues that continue to turn attention to the ratio of support to combat personnel.

B. Military Perspective: Support personnel ratios are always an issue for manpower managers in all Services. Overhead and support costs for the Navy and Air Force have changed little over time. For the Navy, the fleet support workload is fairly stable and clearly established. Air Force support "tail" is determined as a percentage of direct manpower requirements in a similar fashion, generally along major air command lines. The Air Force has a relatively high proportion of support activity covered by "engineered" manpower standards. For the most part, the aggregate of these are the basis for the established ratios that are used at the macro level for estimating Congressional budget manpower requirements, though base operating support models have been built that have a far more sophisticated basis. Army support ratios are addressed somewhat differently since garrison personnel become combatants at times, and certainly many combat force

personnel perform support duty either at certain times or when at certain places. Navy and Air Force price support manpower against weapon systems. Thus, if you add a cruiser or a squadron of F-15s you also fund a support "tail." Army computations are somewhat different based on structural needs and differences of definition and nomenclature. A current and related issue is the accession of increasing numbers of women into the Armed Forces. By law, women are non-combatants and must be assigned to support roles. This has the effect of forcing a larger proportion of men into full-time combat positions.

C. Industry Perspective: The need for productivity improvement is one of the most potent motivators of corporate behavior, and one principal means of achieving this is to increase capital goods input and reduce the input of manpower, while holding output constant. The most dramatic industrial reductions in recent times have come about through robotics and other applications of technology to reduce direct labor. Some analysts believe the most fertile ground for reductions is now in the indirect labor segments. Automated office concepts are aimed at this target, and the availability of widely distributed and very inexpensive computational power (e.g., microcomputers) presents to some analysts the possibility of substantial reductions in middle management.

Future Concerns: An array of issues need to be considered:

• Can private-sector means of reducing indirect labor be applied to reduce military support levels?

• What effect will the proliferation of microcomputers have?

• With the addition of more women to the military, is it time to re-define the division between combat and support duties?

• How far can indirect labor reduction go over the next decade as the result of technological advances? Is there a point of marginal improvement or equilibrium?

• If middle management is actually threatened by the microcomputer, what eventual effects could a shrinking middle-management pool have on the quality and culture of top management?

• How can line managers be better motivated to achieve reductions in support "tail" costs?

• What effects in quality of worklife for direct labor personnel are brought about by changes (primarily reductions) in the proportion of direct labor? Are union fears supportable? Will undesirable changes also effect quality or quantity of output?

Desired Outcome:

• Establishment of a means of exchanging information on productivity-enhancing manpower innovations between the military and industrial sectors.

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APPENDIX 7

PANEL 7 REPORT: PERSONNEL INNOVATION AND MANAGEMENT

NATIONAL FORUM ON HUMAN RESOURCE PLANNING

FOR PRIVATE SECTOR AND DEFENSE LEADERS

PANEL 7 REPORT

PERSONNEL INNOVATION AND MANAGEMENT

1. **INTRODUCTION**:

Panel 7 was chaired by Mr. Christopher J. Wheeler, with Dr. Charles Roll
serving as assistant chair. Table 7-1 lists all Panel members as well as
recorders and observers, together with their respective primary private or
public sector affiliation.

The initial session was devoted to identification of issues relevant for
discussion under the subject of Personnel Innovation and Management. Panel
discussion was not limited to the draft issue papers. The consensus was that
the Panel subject was broad in scope and spanned the issues being discussed in
other Panel sessions. As discussion continued, it became evident that a vast
number of issues were of mutual concern to the private sector and government.
During subsequent sessions, these common concerns were categorized into eight
areas:

- Concern for Employees
- Changing Technology
- Organizational Climate and Culture
- Innovation
- Productivity
- Quality
- Career Development
- Rewards and Recognition

TABLE 7-1

PANEL 7: PERSONNEL INNOVATION AND MANAGEMENT

PRIVATE SECTOR	GOVERNMENT
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The first three were identified as the most important and have the greatest potential for valuable future exchanges between government and the private sector. Panel perspectives on these three topics and their associated issues are summarized below.

2. **ISSUE TITLE**: Concern for People as the Most Important Resource

   a. Viewpoints:

   Both private sector and the government agreed overwhelmingly that people were the overriding concern in their respective organizations. There was some exchange by both sectors on the priority of people over mission when constraints become part of the environment (i.e., wartime operations, government regulations, economics, etc.).

   b. Discussion:

   All too often the government and the private sector fail to understand that the full commitment of our people is critical. Without giving them the ability to grow, participate, and meet their personal, family and professional aspirations, our efforts toward quality, efficiency and increasing productivity cannot be met.

   The Panel addressed the following sub-issues as examples of the kind of factors to be considered in respect of people:

- Rewards and recognition as motivators.

- Quality of work life.

- Training, retraining and development in the face of job or function obsolescence.

- Career ladders, promotability and advancement.

- Leadership, management and individual and organizational vision.

- A brighter, more sophisticated workforce seeking participation, responsibility and accountability based on trust.

c. Resolution:

Commonalities are evident, but need to be seen in operational settings.

3. **ISSUE TITLE**: Organizational Climate and Culture

a. Viewpoint:

Productivity, profits, and military preparedness are all affected by various methods of management and leadership.

b. Discussion:

The Panel discussed at length various personal examples of management techniques that were successful and meaningful. Considerable areas of commonality between the private sector and government were identified in the areas of types of management, manager/worker communications, rewards and incentives, and morale. There was considerable discussion concerning decentralization and centralization, however, there was not a consensus as to what is most appropriate. Both the private sector and the government recognized that successful organizations require a clear vision of mission and objectives.

c. Resolution:

That the issues covered should be further explained, discussed, and information exchanged by on-site visits and personnel exchanges.

4. ISSUE TITLE: Technology

a. Viewpoint:

Government representatives stressed the importance of the issue for their functions. It was stated that it had the potential to completely dominate and drive the future. Private sector representatives were concerned with technology from the viewpoint of training and retraining the workforce. Concerns were expressed about changes in the organizational culture/climate as new technologies are introduced.

b. Discussion:

The Panel examined examples of some of the past mistakes government had made in its efforts to deal successfully with changing technologies and innovations. Ideas were presented on how government might be more successful in driving innovation by changing contracting procedures. A government representative stressed the importance of including human factors in the initial design and implementation fielding of new systems and equipment. Few companies have done a good job of forecasting long-term manpower requirements and integrating personnel planning with the acquisition of new systems and considering new organizational opportunities. Both a vision of the future and a long-range time perspective are key to using and controlling technology.

c. Resolution:

Changing technology is and will be critical to both sectors. Both are deficient in their ability to anticipate and exploit future technologies and prepare for their successful adoption in the workplace.

5. **PANEL CONCLUSIONS:**

a. General View: Within the broad scope of the Panel subject, there are a large number of issues of mutual concern to the government and the private sector. Foremost among these is concern for people. The general consensus was that without genuine concern for people, productivity and quality would suffer.

b. Proposal: Continuing the dialogue and furthering exchange of ideas, management techniques, and research results would be beneficial to both government and the private sector. Such sharing might be accomplished on specific issues by reciprocal on-site visits and furthering contact among more technical and subject-matter experts. Specifically, the private sector was invited to examine the Air Force manpower management computer models.

PANEL 7 - PERSONNEL INNOVATION AND MANAGEMENT

ISSUE A - WORK SIMPLIFICATION

Statement of the Issue: Automation, robotics, traditional industrial engineering techniques, and employee participation are the tools today's managers are using to attain productivity growth through work simplication that is essential in a world of once-client nations turned fierce competitors. What response must personnel managers prepare under these pressures of resource manipulation?

Background:

A. General: Both in military effectiveness and worldwide commerce the United States was severely challenged in the 1970's. Response to the challenges has been harsh, and some of it was invented elsewhere. Work simplication as a response to productivity decline has the goal of reducing the costs of goods and services production by reducing labor input per unit of output. This includes reducing the quality (hence cost) of residual labor needed. Despite these practices, job creation continues to be a net gain over losses, and real per capita income has been growing. The resulting stresses and dislocations are felt by both managers and workers.

B. Defense Perspective: The Armed Services were followers in the area of work simplication because the application of industrial experience to military management was an innovation of post-World War II military thinking. The stress on combat effectiveness was gradually converted to a stress on cost-effective defense preparedness through good management and cost/benefit analysis. In the early 1970's application of industrial productivity measurement to government activity was brought about in the form of the Federal Productivity Measurement Project, which is primarily the responsibility of the Office of Personnel Management, the General Accounting Office, the Office of Management and Budget, and the Department of Labor's Bureau of Labor Statistics. The Department of Defense (DoD), by its size and the nature of its activity, is perhaps the most important contributor to the Federal program.

The means of improving productivity in the military are necessarily subordinate to the means of inflicting combat damage with the lowest losses. Nevertheless, office automation, industrial engineering, and other modern management techniques are all aimed at reducing the human resource input per unit of output (readiness) in peacetime military operations.

A related military interest is the heightened appreciation for the importance of the nation's industrial base to ultimate military strength in any but the shortest of postulated conflicts. Thus, the military view on work simplification carries over very directly into the private sector.

C.   Industrial Perspective: For industry, work simplification has a long and important history. Ever since the human resource input to production began to be a significant cost factor, managers have sought ways to squeeze more production out of less labor. Brutual early methods eventually failed and yielded to scientific and technological approaches. With the industrial revolution has come another revolution of sorts -- behavioral scientists and industrial engineers demonstrated that more humane employment of labor could yield higher productivity.

Whereas in the Federal Government emphasis on productivity seems to be on measurement, industry forever watches effects on income and emphasizes action -- often drastic, usually effective, and occasionally tragic in human terms. Industry relies heavily on innovation in products and services, but innovation in manufacturing and marketing is now attracting as much attention in the never-ending search for a competitive edge. Thus, automation and robotics are being relied on heavily, and managers seek out and experiment with new techniques of employing their workers.

An innovation born in behavioral science research of the 1930's and before, is the participatory management concept and its many variants and applications. Taught by American advisors, desperate postwar Japanese managers invoked workers to protect their livelihoods by sharing in the concern for quality control, work simplification, and even product design and marketing decisions. Today these "Japanese" techniques are having a significant effect on the way work simplification, and other changes, are achieved in this country.

Future Concerns: An array of issues need to be considered:

*   Work simplification has always been anathema to organized labor, since it implies loss of jobs, lower pay, more or harder effort on the job, and transfer of labor influence from labor leaders to corporate management. Will these issues continue to nag at labor, as the nature of foreign competition becomes more widely appreciated and technological change continues to overwhelm traditional work methods?

*   What effects will modern work simplification have on the quality of working life? Will the ability to reduce workforce breed management arrogance and lead to regression in this area?

*   What part will training and retraining play? Does "work simplification" imply easier work requiring less skill? Or will labor dislocations caused by work simplification create greater need for labor retraining into new skill areas? Will the technology of work simplification raise the level of competence needed for the average employee?

- What about managerial simplification? Will the advances in management information processing brought about by distribution of powerful microcomputers to everyone make whole layers of management superfluous? If so, who is threatened and what response is likely to evolve?

Desired Outcomes:

- What are the preparations military and industry personnel managers should be making to: (a) accommodate the impact of modern work simplification efforts to protect the human resource?; and (b) prepare people to contribute to rather than hinder the increases in productivity needed to retrain and improve competitive positions that are, in a large sense, vital to their well-being?

- What personnel management techniques of work simplification activities are likely to be truly effective? Which modern efforts are more faddish than effective? Which may actually have harmful effects on human resources as well as on productivity and military effectiveness?

- If management is threatened, what should be the concerns of personnel managers? What can be done to control the perception of threat where it does not actually exist?

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PANEL 7 - PERSONNEL INNOVATION AND MANAGEMENT

ISSUE B - MANAGING CHANGE AND OBSOLESCENCE

Statement of the Issue: Due to developments in the economy, technological advances, and new management techniques, widespread organizational changes are occurring in private industry and government. Many jobs are changing significantly and others are becoming obsolete. What different or special considerations are most appropriate for the management of those people who hold these positions?

Background:

A. General: The speed at which change has occurred in private companies and in the Department of Defense (DoD) presents a new series of challenges to managers. Different industries and different countries have reacted to this situation with an array of responses ranging from the Japanese, a rather paternal protection of the work unit almost as a family, to the reaction among many US smokestack industries, which have responded with diminishing work schedules followed by factory closings without specific provisions for retraining of displaced workers. The acceleration of change in the private sector and in Defense will keep this challenge in the forefront of management concerns for the balance of the century. The specific problems are associated with:

- Involving staff/workers in decision processes resulting in change

    - Determine the appropriate point in the process to do this

    - Determine what should be done for (with) each member of the organization

- Deciding whether the decision to change the basic organizational objectives are too sensitive to be discussed below the top levels.

    - What advantages/disadvantages result when middle-level managers/workers are involved in advance of public announcement?

- Deciding which actions need to be reactive and which should be proactive.

B. Defense Perspective: The evolution to increasingly complex weapon systems that generally require more technically qualified people for maintenance and operation will create further competition for more qualified young people. The responsibilities of the military manager and the commander in this environment are changing and becoming even more demanding. An interesting dichotomy surrounds the management of

change across a wide spectrum of military systems; for example, most Air Force B-52 airplanes were built more than 20 years ago and some members of current day crews fly in the same plane in which their fathers' had flown. Such examples notwithstanding, it is manifestly clear that obsolescence is occurring at a rapidly accelerating pace in a wide range of technology across the spectrum of military operational and support systems.

C. Industry Perspective: The experience of Japan over the past two or three decades is an interesting demonstration of dramatically changing corporate objectives. The large Japanese steel industry, confronted with strong competition from around the Pacific rim, elected to transition to shipbuilding. This conversion was accomplished in a relatively short period (six to eight years) with a strategy for continuing a logical progression of future conversions/modernization. The objective was to move into levels of advancing technology based upon the lessons learned from industries of the United States and Western Europe. Individuals were retrained within the corporation with the same work group/peer group, retaining the personal structure of the company for individual employees. Retention of the existing work/social structure was reportedly a compelling objective of the change. Retaining the social attitudes of the company was considered important. The transition for the company and for the individual was reportedly less disruptive, and was more successful in terms of rapidly achieving acceptable levels of productivity. As an underlying principle, the companies followed a logical and familiar progression from the existing industry to a related field, optimizing corporate experience in the process of evolution, and preserving the skills and experience of the workforce.

Future Concerns: An array of issues need to be considered:

- Is preservation of work groups during transition worth the additional cost and management attention needed?

- Is the sacrifice of new organizational "vitality" acceptable when significant numbers of new people with their new interactive "chemistry" are excluded from a major organizational transition?

- Are less effective workers retrained under this concept -- and if so, at what price?

- What can be done to make rapid technological change less disruptive in a military organization in terms of:

    -   Effect on esprit de corps?
    -   Accelerated mission readiness?

- What are the implications of rapid technology change in terms of advancing the "work at home" concept?

- How much face-to-face confrontation is necessary in the change/obsolescence transition?

- Does the change in the qualifications of new workers present a problem by placing the private sector and the Department of Defense in even more direct competition during a period when fewer young men and women are coming into the workforce?

Desired Outcome:

- Forecasting the impacts of new technologies and advanced management systems as they occur, will better prepare an organization for any potential scenario. Keeping abreast of new developments should be a top priority of management.

- Where should research be directed to better understand the implications of accelerating change upon the organization and, to order the spectrum of options available to managers?

- What actions should be taken within a corporation or within the DoD to more rapidly identify and respond to change in terms of revisions to personnel policies and organizational philosophy?

- How should personnel planning and innovations in management structure and techniques best fit into a well-devised organizational plan? Retraining or displacement dilemmas can be avoided in adequately planned environments.

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PANEL 7 - PERSONNEL INNOVATION AND MANAGEMENT

ISSUE C - PLANNING AND INNOVATIONS

Statement of the Issue: What are the ways in which organizations can efficiently adapt to changing technologies, product lines, financial structures, and marketing trends in terms of human resource planning? What role should planning and planners play? What personnel management innovations are useless or counterproductive fads and what new ideas offer potential solutions to modern management problems?

Background:

A. General: The planning effort stems from the need to identify both positive and negative aspects in an organization and devise a coordinated, deliberate approach through which designated objectives can be met. Since all organizational processes involve people, strategies are developed to improve long-term effectiveness through management of human resources; people-oriented approaches are used to improve labor-management relations, increase productivity and product quality, achieve a more stable, satisfied workforce, and prepare the organization for change. In the past 15 years planning and innovation management has matured well past its formerly experimental status. Employee attitude surveys, career development, and methods analysis are now commonplace in most progressive companies. Since the recent period of productivity decline and heightened economic competition from abroad, there has been considerable interest in Japanese management innovations and their adaptations of American theories of quality control and participatory management which were never widely embraced in this country. An example is quality circles.

B. Defense Perspective: With increasing attention being given to productivity and efficiency improvement, it is not enough to endorse and initiate such programs. A coordinated planning approach should be used to ensure the overall effectiveness of new personnel management programs.

In September 1982, the Department of Defense (DoD) asked each of its components to identify plans, schedules, and resource requirements needed to accomplish their efficiency review program. With this information DoD began to formally integrate the review concept within existing instructions and policies that concern departmental methods of management analysis and work measurement. DoD planning, programming and budgeting procedures further reinforce the efficiency review concept by rewarding those service or agency components that surpass savings goals. A special pool of civilian manpower spaces has been established for allocation to reward those achievements, and response has been positive.

By October 1984, all domestic and overseas Army commands were to have developed and submitted an efficiency review implementation plan for approval, to include specifics on personnel information and organization structure.

An implementation plan has been developed by the Air Force, which has integrated the efficiency review process into its Management Engineering Program for several reasons in a peacetime environment. The program's functional review process is a means of early identification of functional wartime tasking. This identification is deemed essential to preclude adoption of peacetime economics that could have an adverse impact on wartime capabilities. The Navy program stresses management flexibility for those reasons, too. Such a macro approach lends itself well to the Armed Services, which are required to realize management economies while maintaining peacetime readiness and increasing military effectiveness.

C. Industry Perspective: In the private sector, interest in human resource management innovations has been especially keen. New strategies for addressing declining rates of productivity and facing offshore competition have been conceived. Although organizational improvement is a common element in those strategies, there are no universal standards since the specific approach adopted by a given company usually depends on its particular goals and culture. Planning options, as in the military, can be formulated with the assistance of outside consultants or be prepared entirely in-house. Plans may affect any or all management levels. They can be imposed narrowly from the top, or responsibility for innovations and their implementation can be delegated to managers, internal consultants, resource people, and planners alike. The coordination process, however, can be problematic. Some management is required to synchronize and lead the productivity effort, avoid wasteful duplication, and seek economies in program management. Participative management is one technique for achieving the required degree of communication throughout the organization as managers from various levels accept responsibility for company goals and workers are invited to give advice and opinions. The planning function must then account for numerous supportive practices in personnel policy (communication techniques, job enhancement provisions, egalitarian practices, and mission statements) and measurement (employee opinion surveys, performance and personnel measures, managerial practices assessment, participative rating, and organization-wide diagnoses). Encompassing all change within the organization, management development programs have covered such factors as implementation of formal change strategies, development of participative management skills, and management of dynamic techniques.

Future Concerns: An array of issues need to be considered:

- Planning for a dynamic technological environment may require use of more specialists. What effective trends are emerging in developing personnel expertise to plan for change and implement innovative programs? Will the role of outside consultants become more extensive? How will differing priorities and disciplinary approaches to planning and innovation between the planner/manager and the rest of the

organization impact on staff relationships? What personnel innovations will technology foster? Is "Flexiplace" cottage industry an inevitable product of personal computers?

- How will labor unions react to the various changes and their style of application? Where and how should these interests be integrated into the planning process?

- In what areas and under what conditions does the application of a dynamic strategy fail, and to what extent is the failure attributable to inherent factors inhibiting innovation? How can personnel or organizational structures that are, a priori, least inclined to accept innovations be identified and treated?

- If the administration of productivity-enhancement programs requires a separate planning and management function, how can this staff development process be controlled? What is the point of diminishing returns? What savings factors are to be included in the calculation of those returns?

- What "cultural" and organizational factors must be considered when a foreign or newly-devised management style or system is introduced? What relevant issues need to be addressed in a comparative analysis for determining the compatibility of, for example, Japanese techniques? How can managers avoid being directed by fads of little lasting value?

Desired Outcomes:

- Separate "departments of excellence" or planning centers may be the answer for some larger organizations where centralization of that function is required. However, this approach may not be the best for other organizations, consuming valuable resources and adding to the "bureaucracy".

- Since productivity measurement has become more widespread only in the last 15 years, efforts can be made to study the administration and coordination of such programs within the context of overall organizational plans.

- Planning for innovation will need to stress long-term flexibility of an entire organizational structure that can potentially be influenced by changing technologies and improved management techniques.

- Coordination with the organization's research and development unit can enable managers to make adjustments with greater foresight. What communicative and educational techniques can be developed to better inform planners?

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APPENDIX 8

PANEL 8 REPORT: QUALITY OF LIFE: THE WORKFORCE AND THE FAMILY

NATIONAL FORUM ON HUMAN RESOURCE PLANNING

FOR PRIVATE SECTOR AND DEFENSE LEADERS

PANEL 8

QUALITY OF LIFE: THE WORKFORCE AND THE FAMILY

INTRODUCTION

Panel 8 was chaired by Mr. John DiEleuterio, with Brigadier General Edmond Solymosy as assistant chair. Table 8-1 lists all Panel members as well as recorders and observers, together with their respective primary private or public sector affiliation.

Panel deliberations on the quality of life in the workplace as it affects both the worker and the family addressed four principal issues addressed in detail in pages 8-A-1 through 8-D-4: (1) working conditions; (2) physical fitness programs; (3) the dual career family; and (4) family life. We found these four sub-areas to be highly interrelated, thus prompting overlapping discussion. In the interest of a productive outcome, the Panel members cooperated with Mr. D'Eleuterio and General Solymosy, as discussion leaders, in tailoring the limited discussion time available such that each major issue received balanced attention commensurate with its impact on the workforce and the family; and in establishing issues, priorities, and recommendations for future consideration.

TABLE 8-1

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1. **ISSUE TITLE**: Working Conditions

    a. Viewpoints:

    The workplace physical plant, equipment, and tools, and the degree to which the work environment preserves worker self-respect and dignity, are directly tied to both the on and off-the-job quality of life of the members of the workforce, as well as to their relative level of productivity.

    It was the consensus of the Panel that the quality of life issue can best be discussed and addressed by a Panel composed of members representing the major elements of the workforce, as well as academia. The Panel recognized that its current composition does not include representation by lower-level management, first-line supervisors, and workers -- nor does it include representation from academia.

    General agreement was reached on the existence of two major arenas collectively comprising the work environment and, hence, contributing to the nature of "working conditions".

    - Perhaps most obvious and visible is the physical environment of the workplace (plant, physical facilities and equipment, availability and type of personal tools provided to the worker).

    - Equally important in terms of their contribution to the work environment are the organizational policies and approaches to

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day-to-day work activities (supervisory techniques, organizational and work policies, and general level of regard for the integrity of the employee and his need for self-respect in the workplace).

b.   Discussion:

Working condition impacts upon productivity and the quality of worklife are addressed in some detail on pages 8-A-1 through 8-A-3. The Panel took the general view that working conditions -- both physical and supervisory -- directly affect worker satisfaction/dissatisfaction which, in turn, directly impacts productivity levels within both public and private sector organizations. Panel members generally agreed that work satisfaction leads to nonwork (i.e., family and social environment) satisfaction; and work dissatisfaction leads the individual worker to seek satisfaction in nonwork (outside the workplace) activities.

Abundant hard data correlating improved working conditions and quality of worklife with enhanced productivity, was not immediately available to the Panel. Private sector members noted, however, that some very positive data is available for departmental elements of selected companies. One company, LTV Steel, (not represented at the Forum) has publicly reported a two dollar gain in output for every one dollar input to quality of life improvement programs. In both the public and private sectors, attitude surveys are widely used to provide the data needed to measure levels of worker satisfaction/dissatisfaction.

Recognizing the important role of the family in worker satisfaction and productivity, both private sector and government make use of "open houses", family briefings, and workplace tours as a means of creating empathy of the

family for the employee work environment. Other employer programs measurably impacting the family include "flextime", "flexplace" (work location), company sponsored child care, and a 24-hour hotline service to refer family problems to the correct agency for solution.

Members of the Panel adopted, without debate, the thesis that the physical environment of the workplace is a key determinant of the relative quality of worklife in any organization -- business or military. Primitive working conditions (including out-dated technology, tools, training, and equipment) detract from quality of life and productivity. With respect to the government workplace, physical facility standards often are not uniform from location-to-location, and there are often wide variances in age and upkeep due to differing resource availability by location over the years. Further, in dealing with government facilities development and maintenance, there is continuing concern that members of the public and the Congress not perceive military facilities standards as involving "gold-plating". The Panel members agreed that the government should use essentially the same workplace physical standards as are generally applied for private sector employees.

The membership also reached general consensus that participative management methods, directly involving employees at every level in the work-force, lead to constructive innovations in adapting the work environment to enhance employee motivation and satisfaction. Through use of participative concepts and methods, such as Quality Circles, the expectations of the employee as well as improved work methods can be incorporated into the organization's physical plant as well as its organizational goals and objectives.

In both the private and government sectors, attitudinal surveys a-
being used as a means of isolating those workplace and family assistance areas
in which improvements will be most productive. The Panel agreed that quanti-
fiable data relating working conditions with employee expectations, self-esteem,
and productivity enhancement must continue to be collected and addressed as a
matter of routine.

The following military-related quality of life issues were addressed
in some detail by the Panel:

- A program enabling Federal employee spouses to take Federal jobs in
  their vicinity before they are opened to the general public or
  contract performance. The issue was addressed in the context of
  the relatively high military spouse unemployment rate, as con-
  trasted with private sector spouse unemployment rates.

- Family Service Centers operated by each of the military services,
  including crisis referral for family members, as a means of
  enhancing worker satisfaction and productivity through family
  support.

- Relocation of employees and its effect upon the family. Some
  industries try to limit the number and distance of moves, but
  provide compensation or reimbursement for all costs including real
  estate exchange. While private industry appears to be taking a
  dimmer view of moving personnel due to steadily increasing moving
  costs, employees who move at management's discretion are fully
  compensated. Military entitlements for relocation, on the other

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hand, were clearly not adequate. For example, no real estate losses are compensated and only one dollar of every four dollars in moving expenses is reimbursed. Private sector Panel members were unaware that military families were so much "under-compensated" for relocations. Whereas private sector employees have choices on whether to relocate, career military members do not. The Panel believed it is management's responsibility to compensate fully for the relocations it directs.

c. Resolution:

Efforts to gather data to correlate physical plant conditions with productivity and family satisfaction must persist. Issues needing further development include: 1) changing demographic profiles; 2) retention surveys in private sector and government to assess attitudes; 3) financial and emotional impact of relocation; 4) spouse employment issues and solutions, 5) personal real estate considerations in a mobile workforce; and 6) balanced military/Federal civilian/contractor force composition taking into full account military mission and rotation base requirements within the Armed Forces.

The Panel concluded that:

- The working environment must include the tools and services to allow each and every member to successfully complete his/her job.

- A well-equipped and supported work area and a nice desk will have limited effect if employees are not treated with respect and

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dignity. Self-respect and individual dignity of the worker shou.:..
be a constant consideration.

- The workplace environment should be structured to provide t...
employee an opportunity to "have a say", through participai:....
management methods such as Quality Circles, Quality-of-Worklife
Committees, on-going programs such as regular departmen:...
meetings, and related techniques.

The workplace must be sufficiently flexible to adapt to meet the
changing needs of employees. Consideration should be given and has been given
in the private sector to "flextime" and "flexplace" arrangements for employee...
All such arrangements need to take into account what is in the best interest or
the business and/or accomplishment of the mission, as well as the welfare of t...
employees.

3. **ISSUE TITLE:** Physical Fitness

    a. Viewpoints:

    There was Panel consensus that "Health Promotion" -- which includ...
physical fitness and wellness programs -- is a more appropriate title for th...
issue than simply "Physical Fitness".

    b. Discussion:

    Private sector endeavors have encompassed "stay well" programs such ...
smoking cessation, stress management and various other education and awarene...

programs. Private sector initiatives include innovative plans for cost-sharing with employees who pay to use fitness centers. At Campbell Soup Company, the cost to join the fitness program is $100 per year. Initially, the employee pays $50 and the company pays $50. If the employee uses the facility three times per week for a year, the company reimburses the employee his/her $50. In a similar vein, an oil company has built the largest indoor jogging track in the world for its employees. Selected companies have cited statistics such as a 30% reduction in medical claims and a 30% reduction in sick days lost, after the establishment of a company health promotion program.

The military sector has historically conducted physical fitness training. More recently, the Services have initiated programs to educate service people about stress management, smoking cessation, weight control, substance abuse, and nutrition.

An organizational health promotion program must have the commitment of top leadership if the objectives of the program are to be successfully attained. Sufficient facilities, reasonable time off to use the facilities, and incentives to maintain good health must be developed for, and offered to, all members of the organization. The organizational program should be voluntary and non-discriminatory, to include all levels of workers. The objective of these programs should be to promote good health, to reduce dysfunction, and aid in the repair of damaged body parts and promote healthy body maintenance on a regular basis.

To improve the overall quality of life of our employees and service members, their families should be able to participate at some level in the health promotion programs offered. Again, Campbell's Soup is considering

opening their exercise facilities to family members. The military services are already distributing the Family Fitness Handbook, developed by the Army, to all service members and their families. **Note:** At the request of the private sector Panel members, copies of that publication are being sent to their companies for their evaluation and reference.

   c.   Resolution:

   The Panel agreed that: 1) health promotion was a more appropriate title for this issue; 2) the goal of health promotion is to reduce risk of illness, premature death, and disability; 3) this proactive approach to health will repay any costs of the program in improved productivity and morale; 4) families of employees/service members should be included in programs where possible; 5) evaluation of the cost/benefits of this approach is necessary to document its impact on the quality of life of employees/service members; and 6) continued dialogue between the private and government sectors can benefit both as we begin to evaluate the impacts of health promotion programs.

4.   **ISSUE TITLE:** Family Life/Dual Career Family

   a.   Viewpoints:

   The subjects of dual career families, and family life in general (treated in separate issue papers at pages 8-C-1 and 8-D-1) are so closely related that the Panel elected to address them together during these proceedings -- particularly in view of the limited discussion time available.

   The Panel reached early consensus on the following views:

- Employee mobility can disrupt family life.

- The military is further ahead in addressing the challenge of dual-career families.

- Family support services represent a valid qualify-of-worklife need, and must be provided to employees on a continuing basis.

b.   Discussion:

In the Armed Forces, the all volunteer force has resulted in a higher percentage of married service members. This has brought about a greater need to provide family support programs. Civilian industry is starting to "officially" recognize the impact of the family on their employees and selected companies have begun family support programs. The military provides a wide range of services that include child care, information and referral, and family counseling.   Civilian industry is establishing programs such as in-plant child care and 24 hour advisory "hotlines" to provide information and referral.

The military is becoming more involved with spouse employment. With 50% of military families requiring or electing two incomes, helping the military spouse remain employed can be critical to retention of the military member. Selected private sector firms offer some spouse employment assistance, usually limited to hiring spouses if a vacancy exists and the spouse is qualified.

The mobility requirement facing the military family can cause extensive disruption of family life. The lack of adequate reimbursement for military

relocation expenses can greatly compound the problem by imposing real financial hardship on military families required to move. Studies indicate that for each four dollars of moving expenses, service members only receive about one dollar in reimbursement. The military is working to reduce moves, but is constrained in doing so since most are not discretionary, but are required to meet overseas rotation, replacement of separatees, and training demands. Civilian industry moves its employees much less than the military, and generally fully compensates the employee for the expense of moving.

c. Resolution:

The Panel:

- Strongly supports increased compensation commensurate with cost for military moves.

- Recognizes an urgent and growing need in both the private sector and military for programs to assist employees and families in areas such as stress reduction, substance abuse, and family violence.

5. **PANEL CONCLUSIONS**

a. The Panel members agreed that the family is an inextricable part of the employee "package" and, as such, should be considered in organizational and corporate planning. Because of the nature of military service, the Armed Forces are considered to be ahead in "family care" thinking. However, private industry is recognizing the reality and the necessity for programs that meet family needs. The concept of participative management and human resource

development and maintenance (e.g., health promotion programs, job training programs, counseling programs, and family sensitivity in establi;hing relocation policies and practices) must extend beyond the individual employee to include the family unit. Panel members agree that such initiatives will increase productivity and "mission accomplishment".

b. The Panel resolved to maintain the contacts and the network established by its coming together as part of this National Forum. The members resolved to continue the dialogue, and to share future challenges and solutions for the mutual benefit of all. Future meetings are recommended to facilitate the "networking" that has occurred as a result of this Forum. In this regard, the immedicate exchanges planned or underway between the Panel members on their own initiative include:

- Provision by the military representatives to the private sector members of the military publications on family support cited and discussed in this Panel report.

- Provision by a private sector representative of detailed information on the use of surveys to quantify the impact on the workforce of adverse physical working conditions. The information will be released in response to the request of the representative of the Office of the Secretary of Defense.

- Provision by a military representative to each Panel member, of a copy of the Report of the Conference on Employee Counseling, conducted in New York on 14 and 15 March 1985.

PANEL 8 - QUALITY OF LIFE: THE WORKFORCE AND THE FAMILY

ISSUE A - WORKING CONDITIONS

Statement of the Issue: Increased emphasis on productivity has turned the attention of managers to working conditions and their effect on it. What modifications can be made to the physical and psychological work environment to generate more output and faster turnaround times per unit of labor input? How do the requirements of work activity affect family life? What can organizations do to accommodate the family obligations of working parents?

Background:

A. General: Three general theoretical relationships have been put forth by behavorial and social scientists regarding work and nonwork activities and general well-being. First, work satisfaction leads to nonwork satisfaction through a spillover effect. Second, a compensatory model proposes that work dissatisfaction leads to an individual's focus on nonwork satisfaction. And finally, there is no relationship between work and nonwork activities and thus they are carried out independently. The first two serve as a basis for deeper management involvement and are based on the notion that work environment has far-reaching impact. Over recent years the acceptance of an increased social responsibility on the part of these organizations is a reflection of heightened awareness of the human ramifications in quality of worklife. Consequently, the recent emphasis on increased productivity through both capital and human improvements has sparked new research on all aspects of worklife ranging from physical, ergonomic issues to psychological issues involving management-driven environment in the workplace. Studies have sought to describe the returns, if any, of everything from redesigned organizational cultures to simplified work procedures and improved lighting. Human resource issues such as these are central elements in what has become a holistic or integrated approach.

B. Defense Perspective: Activities designed to improve the quality of worklife are a concern in the Department of Defense (DoD), as in the private sector, which has led to the creation of a workforce motivation program designed to address worker needs and simultaneously facilitate the channeling of their creative energies toward attaining organizational goals. A wide array of specific service- and DoD agency-directed initiatives employing both behavioral science and management analysis techniques have been undertaken. Organizational effectiveness, job enrichment and design, and participative management (e.g., quality circles) are among the initiatives intended to fulfill workers' desires for more meaningful occupation. The educational and formative backgrounds of younger workers has been identified as a major stimulus to change in the basic structure of the current workforce; organizations such as DoD have had to respond in the afore-

mentioned ways to remain competitive and productive as both a military structure and a civilian employer. Recognizing the importance of its human resources, the military has been applying organizational effectiveness techniques since the early 1970s in an effort to maintain a high state of combat readiness and make the chain of command more cohesive; it is noted, however, that the Army has now eliminated its program. All Services have used internal consultant teams with management and behavioral science backgrounds to evaluate the effectiveness of work environments. They recommend the application of various techniques such as team-building, goal-setting, and survey-guided development as structures and processes for human resource utilization improvements. Job enrichment is based on the notion that workers will respond better to organizational goals if they have a sense of involvement in the decision-making process. "Quality circles," either planned or already implemented for 15,000 government workers at 139 locations, is a form of participative problem-solving through which work-related problems are identified and analyzed. Together, these approaches are designed to allow a workforce to work "with" management instead of merely for it.

C. Industry Perspective: More and more managers are adopting a holistic approach to personnel management in hopes of achieving a higher degree of social cohesion and greater worker satisfaction, both on-the-job and in terms of overall well-being, to meet the challenges of improving productivity. Job redesign, career development and team approaches are among the tools used to give employees the sense of purposeful occupation they desire. Employees are then more likely to accept increased responsibility for their own as well as the company's performance if they perceive an increased connection with upward mobility or reward. By establishing shared values between management and employees in matters ranging from the general issues of organizational ethics to the specific requirements of integrating human and technological needs, a successful quality of worklife can be achieved. Concerning organizational ethics, many corporations have been moving to resolve any inherent communication problems between occupational groups that sometimes manifest conflicting subcultures; they are also seeking to achieve their integration into the overall organizational culture to the extent possible. Joint worker-management sponsorship of participative experiments (e.g., quality circles) has emerged in many organizations as a means of acquiring the desired level of staff communications necessary for efficient operations that do not present a compromise for workers. The improved work environment, which ideally translates management flexibility and innovation into productivity increases, comes as a result of an equitable distribution of rewards. The increases in productivity can be used to allow workers greater flexibility within their own work lives. This is particularly important to working parents as they have child care needs, for example, and may require some time to tend to them. These opportunities, along with other organizational support on such matters, can mean reduced stress and an overall improvement in employee well-being.

Future Concerns: An array of issues need to be considered:

- Fewer than 25 quality-of-worklife management systems exist in the public sector in North America. What effects will this have on government's ability to attract and retain quality workers over time if they are, as it appears, ill-equipped and/or reluctant to implement these programs?

- Will an increased emphasis on working conditions create noncomplementary decreases in efficiency due to added personnel assigned to quality teams or acting as "facilitators"?

- Increased worker autonomy or diversification of work may not be popular with those middle managers whose authority may, in fact or in appearance, be reduced as a result. What will be the effects of modifications like these throughout all levels?

- What are the combined effects, positive and negative, of quality-of-worklife programs, and at what point would organizations experience diminishing positive returns? What are the problems in quantifying such returns for application to predictive financial and social research models?

Desired Outcomes:

- Working conditions, their relation to nonwork activities and vice versa, directly influence general physical and psychological well-being. All organizations should recognize this and devise a practical set of options. Experimental programs are probably the best way to judge the effectiveness of improved management systems since they are quite sensitive to localized phenomena.

- More research needs to be performed to better understand the effects of each type of "improvement" and the effects of various combinations so that those organizations that are less willing to accept the risks involved in experimental programs have a base of knowledge that will aid them in making the right choices.

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PANEL 8 - QUALITY OF LIFE: THE WORKFORCE AND THE FAMILY

ISSUE B - PHYSICAL FITNESS PROGRAMS

Statement of the Issue: The assertion has been made that a strong relationship exists between physical fitness programs and higher morale, and even greater worker productivity and decreased incidence of sick leave. What are the current thoughts and findings on this subject? Are organizations continuing to offer physical fitness programs or are they becoming skeptical? Why?

Background:

A. General: For years now, many Japanese organizations have been employing plans which require workers to participate in various sorts of on-the-job fitness programs. They have learned that programs like these improve worker morale and even enhance productivity as well as produce other positive results such as: decreased stress levels, a reduction in absenteeism, decreased worker turnover, and savings in health care costs. Japanese interests which recently opened factories in the United States brought these techniques with them, and since that time there has been a desire by many organizations to jump on the bandwagon despite some recently advised prudence. American industry was slow at first to follow suit: some US managers suspected that the success of such programs was really dependent on more deeply-rooted cultural factors. Canada was an aggressive promoter of on-the-job fitness programs. One private Canadian company sold and administered 60 such "wellness programs" in 1982. Virtually all large industries in the US now have these programs or are planning to implement some sort of program in the near future. Most are building on site facilities, but smaller companies are buying into local sports clubs because of the high cost involved in building sports complexes and buying custom "wellness programs." The wellness programs have helped to improve employee vigor, stamina, and endurance. The reported results are positive from these programs and are manifest in decreased stress levels for employees, an increase in worker morale, a reduction in absenteeism, a decrease in worker turnover, and an overall increase in worker productivity. The combined effect of fitness programs can usually spell a substantial savings for the company in insurance costs and disability payments.

B. Defense Perspective: Unlike private industry, the military has always required that their servicemen be physically fit. In basic training this belief in physical fitness is stressed as the foremost objective from the first day of camp. It is imperative that military personnel remain physically fit in order to perform adequately under the rigors of combat. In studies conducted since World War II, the evidence has been conclusive that physically fit persons do not tire as easily, their reactions are much quicker, they tend to heal from their wounds faster, and they perform better under stress than those individuals

who are not "in shape." Because fitness was accepted as a key to job performance, tests were set up to determine the fitness of each individual. In some instances failure to meet minimum standards requires individuals to attend fitness improvement or weight programs; in the worst cases, individuals are separated from the Service. In general, all branches require some sort of timed run designed to measure endurance, and a test to measure body strength such as pull-ups or push-ups. The Navy runs a test to check the body fat of an individual. Even while recognizing the need for top physical conditioning, the military has no joint mandatory on-the-job fitness program at present. The Army and Marine Corps have policies that allow units and individuals to engage in on-the-job programs; whereas, the Navy and Air Force have no such policies, and leave physical conditioning up to the discretion of the individual, although they are still responsible for passing the fitness test. Prior to the Vietnam War, some of the Services did offer specific times in which to engage in physical activity. However, many personnel came to use this time for less productive pursuits, and it was eventually dropped. At a 1982 Department of Defense symposium on physical fitness, it was found that mandatory physical fitness time is not very useful; a recommendation from that conference included testing to determine whether or not on-the-job fitness programs had any real benefit.

C.   Industry Perspective: A trend toward company sponsored fitness programs has grown over the past several years. Larger companies are building sports centers on the job site for their employees and families to use. They are also buying "wellness programs" from private companies; these private companies in turn help to organize and run the programs once they are implemented. Typical results attributed to these fitness programs are: halving health care costs, 50% improvements in worker productivity, halving worker absenteeism, and a one-third reduction in employee turnover. Vendors of fitness programs claim a $5.60 return for every dollar invested. Greater employee morale, increased productivity, and reduced absenteeism, add up to significant savings that would otherwise have gone, for instance, to sick pay. Employees tend to regard these programs as management benefits, and if these programs apply to all employees, they get the satisfaction of enjoying some of the same "perks" as their bosses. Other programs offered by companies in hopes of reducing rising health care costs have included offering cash bonuses to employees who lose weight and quit smoking. These organizations have been adopting a holistic approach to human resources that also encompasses social and psychological counseling. Quite often, stress management programs and alcoholism workshops are provided. Seeing the benefits, smaller organizations which cannot afford fitness programs and sports complexes are finding means of providing fitness programs, such as offering employee and employee family memberships in local sports clubs.

Future Concerns: An array of issues need to be considered:

*   Some health and sports facilities may only be available to executives. What can be done to realize organization-wide benefits? By what means or authority will health insurers be able to control such programs?

- What effect will a health and fitness program have if the facility is not on site and employees lack the motivation to attend regularly? How can these motivational problems be cured? How are they related to overall organizational morale? What lessons are to be learned from the existence of under-used facilities? Does this not indicate a far more profound problem?

- If physical fitness programs decline in popularity among employees, and conflicting evidence on the effectiveness of company-sponsored programs influences insurance companies to partially withdraw the incentives, will organizations continue offering them?

- As increasing demands for higher productivity are made, stress relief programs may become more widely used. Are these programs enough? Should they become mandatory?

Desired Outcomes:

- Morale improvements have been realized through participation in team sports. This represents a minimum informal approach. A more structured program, perhaps individually designed, could cause much greater returns through improvement of people.

- Physical fitness programs are generally proven to be a very effective means of reducing stress. Stress control seminars are equally beneficial, but neither can be effective if employees cannot find the time to participate. Perhaps these programs require set-aside time, and management must account for the cost of in terms of tangible net benefit.

- In many cases, physical fitness programs have significant impact on productivity. These applications could be more widespread in high-stress and high-physical effort occupations.

- Sports and fitness facilities, like any other outlay of capital, must be used by a maximum proportion of people to realize the highest return per unit of capital. They should not be exclusive or serve as "perks" for a select group.

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PANEL 8 - QUALITY OF LIFE: THE WORKFORCE AND THE FAMILY

ISSUE C - DUAL CAREER FAMILY

Statement of the Issue: Recent demographic and employment trends portend a continued increase in the number of dual career families. What are the problems associated with this social phenomenon, and how do they affect organizations which employ these couples? What are organizations doing to assist their employers in dealing with the ill-effects of dual-career induced stress?

Background:

A. **General:** According to the Bureau of Labor Statistics, the absolute number of women in the workforce will more than triple in this decade. Of all families in the United States with at least $22,000 in annual income (representing the top fifth of all families) 54% have dual careers. In 1983 that represents about two-thirds of all families. Because this is a relatively recent phenomenon, the stresses and conflicts of the situation are new to many of these couples since they have grown up in traditional households with well-defined breadwinner and homemaker roles. The problems that arise within the family unit can be placed in three general categories: (1) incompatibility of career paths; (2) division of child-care responsibilities; and (3) division of household labor. These can indirectly impact on productivity and generate or contribute to several types of organizational strains. Since the number of dual career families has increased dramatically and shows every sign of continuing to increase, more organizations are formally recognizing and addressing the problem. Greater awareness has fostered changing attitudes, and organizations have ceased to define these problems as purely personal ones. Employee demands have also spurred both thought and action on day care, flexitime, liberal maternity/paternity leave, and flexible relocation benefits programs. Many successful programs have already been implemented.

• **Defense Perspective:** There are slightly fewer employed military spouses proportionally than there are in the private sector. An average of 52% of military spouses (58% and 40% for US-based and overseas, respectively) work outside the home. The predominant motivators are economic and self-fulfillment criteria. According to one report, dual military couples have fewer problems with marital companionship than civilian-military couples (Families in Blue: A Study of Married and Single Parent Families in the U.S. Air Force, Family Research and Analysis, Inc., 1982), however, one cannot assume the absence of significant family problems even in those cases, and this poses significant problems for military managers.

The primary concern of the military manager is combat readiness. A primary concern of the military family can be potential overseas

deployment on short notice. There are significant implications for military readiness when service members -- men or women -- are unprepared to go when military requests dictate. This management problem is also compounded by remote or isolated assignments which are not suitable for dual military parents (particularly unsuitable for single military parents) placing an unfair burden on the more "vulnerable" bachelor (man or woman), and the service member with a non-working spouse who must take that assignment.

The Armed Services are providing support for families through a variety of agencies and services in addition to the standard benefits such as medical and dental care:

- DoD-wide there are 514 child-care centers with combined capacity for 53,000 children to support the needs of all families.

- There are 427 youth activity programs which provide older children and teenagers with a variety of activities.

However, there are over 1.5 million children (about 48 percent under age 6) belonging to active duty military personnel, and together with the increasing number of spouses in the workforce, the Services are pressed to provide some means of accommodating the increased demand for such programs.

- Each of the Services has responded to the general demands of modern family life through programs to assist the military spouse to develop job skills and to continue education. Such programs are designed to diminish the impact of the high rate of military mobility (a move every 2.2 years on the average) and the special problems associated with overseas moves which result in inter-ruptions in career development and employment continuity. For example, unemployment among military spouses is over twice the private sector unemployment rate.

Since spouse support for a service member's continuation in the military is the most frequently cited factor in career decisions, it will become a greater challenge for the military to support harmonious dual-career families.

C. Industry Perspective: The problems of dual-career families have frequently not been found on the corporate human resource agenda, and are often regarded as purely personal dilemmas and not the respon-sibility of the company. Now these topics that were once almost exclusively treated by womens' workshops and resource centers are becoming of wider company concern in terms of productivity and the human resource issues relating to them. Competing professional inter-ests and child-care responsibilities often do not go well together in terms of corporate work demands upon their employees. Greater care is being taken by many companies to avoid introducing unnecessary added pressure into the personal lives of employees through extended travel and relocation. IBM, for example, is well known for institutiona-lizing limits on their number of transfers. Experiencing inadequate or nonexistent counseling and support from their employers in the face of such job demands, many professionals have shown a propensity to resign

PANEL 8 - QUALITY OF LIFE: THE WORKFORCE AND THE FAMILY

ISSUE D - FAMILY LIFE

Statement of the Issue: Is occupational stress on the increase? How is it affecting family life? What new values, if any, are being infused in society now that there are more two-career families? More women are entering the workforce for economic reasons and self-fulfillment; is the continued acceleration of this trend rendering this generation somewhat ill-prepared to deal with the new family realities? What can organizations and individuals do to help each other?

Background:

A.   General: The traditional family roles of breadwinner and homemaker are giving way to a two-breadwinner arrangement, often creating a conflict of career interests that stretches across the desk and into the home. Well over half of the families who now earn more than $20,000 a year are discovering that their lives are becoming a precarious balancing act of often incompatible family and career responsibilities. These dual-career families are being faced with significantly different family and career decisions than those of their parents. A major problem facing them is increased stress, which is rooted in the ever-increasing demands upon workers for greater productivity. This has been identified as an exacerbating factor which can lead to alcohol abuse, wife abuse, and child abuse. No one can say for sure what harm has been done to children of such families, and how it will affect them in the future. With the increase in families with both parents working, use of child-care centers has become a growing trend.   Infants through 5 years of age, until they become eligible for kindergarten enrollment, can be dropped off at centers where they will be taken care of. No longer are the basic learning processes and socialization experiences purely a function of the family, but rather a function of a community. When these children get older, they often return from school to an empty house. There has been great interest in the psychological effects of such an upbringing. How can the long-term effects be assessed now, and what can be done? Should employers or the state recognize the new realities and accept responsibility, or should this remain a personal problem?

B.   Defense Perspective: In today's military about 80% of the officers and 60% of the enlisted personnel are married; over 50% of these families have spouses who are employed full-time. Problems associated with dual-career family life are as prevalent in the military as in the private sector, in addition to the traditional stress associated with duty and duty-connected separation. Tours of duty apart from family cause family life to suffer as well as harming the performance of the military member. The majority of married service members have children, and over half of married couples are dual-career families.

Military parents seek child-care centers to care for younger children while they are at work; however, only 514 child-care centers with 53,000 spaces exist among all branches of the military to handle over 1.5 million children. These centers now have tremendous influence in traditional family concerns of basic education and socialization. When beyond the age of day care, children are left at home to await the return of one or both parents. These children are commonly called "latchkey children." Children who live on military installations sometimes have an option to attend a youth activity program if it is available to them; however, only 427 youth activity programs are available among all Services. With a parental need to find services for their children, they turn to on-base programs. But these child-care centers and youth activity programs only have the capacity to accommodate 53,000 children. No one is confidently predicting what impact these new trends will have on workers in the future.

Stress is another consequential concern, and stress reduction programs are offered by the Services to deal with problems of modern families. Counseling programs are helping to improve service family life. In a specialized related area, training in financial management is offered to help ease this problem. In many families, financial problems can be a major source of stress. A typical stress symptom, child abuse, is on the rise in military families. Approximately 6,369 cases were confirmed in 1984. In an effort to help military families with such family problems, Congress in 1982 set aside $28.3 million for family social problems, particularly prevention of child abuse and spouse abuse, and aimed at identifying and treating abusive families. Programs have also been implemented to help families deal with alcohol and drug-related problems. In addition, since 1980, all Services have established or strengthened over 250 Family Service/Support Centers to offer a wide range of information, referral and services to service-members and their families.

C. Industry Perspective: Well over half of the families who earn $20,000 a year or more are considered dual career families. These dual-career families are now faced with a different set of problems, apparently more difficult than their traditional counterparts faced. A major problem affecting family life now is the increased stress present as a result of dual-careers. One phenomenon that increases with dual-career marriages is commuter marriages. In these marriages, one spouse visits the other and family on weekends and holidays. This is a highly stressful situation that is becoming more common. Even if the financial rewards are high, it can still push a relationship and family to the breaking point. The traditional role of wife and mother is giving way to a career-oriented role for women. The woman goes to work either out of economic necessity or, quite often, to fulfill a desire to achieve success in outside work. No longer are the basic learning processes and early socialization exclusively a function only of the family, but they are increasingly becoming functions of society as a whole, through child-care centers. Some companies offer day-care centers for their employees. This allows a child to be closer to a parent, but programs like these -- even though they are very popular with employees of the companies which have them -- are not wide-spread. "Latchkey" children of two-career families are also becoming prominent. Unsupervised, these children return home from school and

when faced with relocation, taking their ideas and innovations over to the competition. Relocation, which is occasionally used as a management development technique, is being resisted by dual-career couples not only because it entails greater cost, but because women are becoming more influential in family decision-making. Potential relocation candidates will make decisions based on both careers, so employers are offering spouse relocation job search services and flexible relocation benefits. This usually includes a core program of minimum benefits, while specific needs are met through a complementary offering of options. The most prevalent of these is spouse employment assistance; other programs include child care, flexitime, flexiplace (work at home), maternity/paternity leave, seminars, and relocation assistance. Companies are finding it necessary to better define their role in assisting dual career families. It is also becoming more apparent that both employer and employee have a stake in the alleviation of these problems.

Future Concerns: An array of issues need to be considered:

- A study by Catalyst, a New York resource center for businesswomen, has shown that companies recognize that dual career family problems may negatively affect production, morale, recruiting, and profits. How do these effects detract from the overall work environment? The inability to cope with these matters may bring undue hardships on fellow employees.

- How will career-oriented couples respond to recruiting designed to lure them with dual career tailored counseling and benefits? Will a pool of talented individuals be taken by those organizations best able to afford such benefits and run these programs?

- Will the social problems of dual career families become the recruiting concerns of the next decade? Relocation and placement programs are valuable recruiting tools. How will this affect the trends in job mobility? How should the military adapt?

- Will organizational human resource budgets be capable of taking on additional responsibility in providing marriage seminars and providing on-site child care or administering referral? What are the costs?

- How can the benefits of such programs be quantified? Will the increased interest in redefining the organization's role in family affairs be diminished? Is it subject to popular trend or rooted in well-founded theorems of social and behavioral science?

Desired Outcomes:

- The initial step is redefining the organizational philosophy on family affairs. Where is the line to be drawn, if at all?

- Surveys can easily be administered to determine the extent of organizational disaffection and what programs may be desired. Carefully developed surveys may provide a better perspective on employee desires for additional benefits.

- There is a need for pilot and experimental programs across a variety of organizations to determine the viability of different benefit options.

- Both military organizations and private sector organizations where geographic separation and an acceleration of the dual-career trend is evident, should forge ahead in designing assistance programs to offset adverse affects in productivity and readiness.

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await the return of a parent from work. In response to the rising number of these cases, communities have instituted programs to provide assistance to these children. They provide a phone number for a child to call if he/she encounters an emergency or simply experiences fear. The responses from programs like these have been positive. Other initiatives by organizations which indirectly influence family life include a 4-day work week, establishing counseling services for employees with substance-abuse or spouse-abuse problems, and running various stress reduction and awareness seminars. If career goals continue to be a high priority for younger employees, corporate emphasis on these and other programs may need to increase.

Future Concerns:

- To what extent are the pressures of the workplace responsible for the high divorce rate and the rising number of reported child and spouse abuse cases in this country? How will modern family life in this setting influence future leaders? Their priorities? Their values?

- How will the decreased contact and communication between parents and children in day care change modern family life? Are the responsibilities for formative early socialization experience and general child care going to pass to institutions?

- What are the stresses of dual-career couples that relate to reconciling traditional family roles with career goals. When the trend of women entering the workforce finally stabilizes at some plateau, what restructuring of roles will have occurred to compensate for the reduced home presence of a parent? Will the birth rate drop? Will fathers leave the workforce to take on more child care responsibilities? Will employers take on more family care responsibility?

- What affect will commuter marriages have on family lifestyles? Will families become loose knit groups, or will an absence pull the family together?

Desired Outcomes:

- Determine how organizations can best accept responsibility for increasing employee awareness of the various issues and dilemmas facing the modern family. Awareness and initial education can help greater numbers of workers articulate and cope with their needs.

- As child care centers play a greater role in education and socialization processes, what role should individual parents play in determining what values are emphasized? The neutrality of these facilities could help retain the family's primary role in these functions.

- Determine how local communities should address the immediate psychological and practical needs of "latchkey" children.

- Determine how organization-run programs and more flexible job situations can help reduce the tension and stress which contribute to strained family relations. The increasing number of two-income families may provide the financial flexibility required to find adequate child care and counseling solutions.

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APPENDIX 9

PANEL 9 REPORT: RETHINKING REWARDS AND INCENTIVES

PANEL 9 REPORT

RETHINKING REWARDS AND INCENTIVES

INTRODUCTION

Panel 9 was chaired by Dr. Thomas Wickes, with Mr. William D. Clark serving as assistant chair. Table 9-1 lists all Panel members as well as recorders and observers, together with their respective primary private or public sector affiliation.

The objective of this Panel was to compare and examine the rewards and incentives available in the private sector and the military. The Panel chair opened the session with introductions and an encouragement of the membership to feel free to express any thoughts with the assurance that the deliberations would be non-attributable. Private sector and military members were anxious to share ideas and establish common ground. The morning session was mainly devoted to exchange of information on military pays and bonuses. Panel participants agreed to deviate slightly from the issues as presented in the formal Issue Papers. However, all believed the main points of the Issue Papers were covered in the Panel discussion and in the report.

TABLE 9-1

PANEL 9: RETHINKING REWARDS AND INCENTIVES

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1. **ISSUE TITLE**: Compensation Disincentives

    a. Viewpoints:

        Panel members agreed that compensation disincentives exist in the
private sector as well as within the government and both should be working to
eliminate these wherever possible.

    b. Discussion:

        Compensation disincentives exist whenever employees are not adequately
compensated and especially when out of pocket costs are not reimbursed. For the
military, a primary example of this is inadequate reimbursement for Service-
directed relocations. Recent surveys indicate the average out-of-pocket cost to
the enlisted member is significant and may be as high as $1,700. Private sector
Panel members believed that this was an area which required immediate attention.
One firm compensates for all moving costs and provides extra payments to aid in
establishing a new household. The private sector members expressed concern that
without this compensation employees would be considerably more reluctant to
transfer, but some would also leave.

        In order to identify areas where disincentives exist, private sector
members have employed consulting firms and surveys. They found that these were
effective in early detection of problem areas. One key to the use of these
methods was non-attribution of criticism. Military members discussed their
experiences with survey information and agreed that it was highly useful in
pinpointing members' concerns.

c. Resolution:

This was an area in which Panel members felt that each side had similar problems but that it was more pronounced in the military. The membership agreed that future discussion could be of great use to all, possibly with the inclusion of Congressional representation.

2. **ISSUE TITLE**: Special and Incentive Pays

a. Viewpoints:

In order to retain the right kinds and numbers of people, the Panel felt that special and incentive pays were the primary tool available in the military and that these pays should be increased relative to overall compensation.

b. Discussion:

Private sector members were very interested in the military's techniques for retaining personnel in hard to fill skills. The primary tool for this is the special and incentive pays program. Private sector members were particularly concerned with evidence that the program works. The military members assured them that there is positive evidence that these pays improve retention and cost-effectively increase the number of manyears of service obtained.

Some private sector members addressed their own experiences in retaining personnel with unique skills. These specially trained individuals command salaries apart from the regular compensation ladders. Much like the military, the additional compensation helps keep these people with their companies.

Some discussion in this area was related to the amount of bonus money available for discretionary pay within the military. Panel members universally felt that this should be increased to provide greater flexibility to military managers. This could very well be additive to existing funds, but should be considered within a restructuring of pay.

Another area of interest was potential competition among the Services. While military entitlements are generally the same for each Service, there are a few exceptions which are tailored to address Service differences. Additionally, each Service, by policy, views some compensation programs slightly differently because of unique needs. The Army, for example, has an apparent disadvantage in attracting personnel. To lessen the apparent difference in recruiting diffi- culty, Congress has established special enlistment bonuses and educational programs available only to Army recruits. The Navy has the unique problem of sea duty. In order to lessen the impact of such duty, sea pay is provided. The Navy is also using a bonus for nuclear personnel in order to retain this scarce resource. The Air Force uses reenlistment bonuses to target particular high-tech skills. It was felt that these pays help provide a balance among the Services.

c. Resolution:

With regard to flexibility in compensation, special and incentive pays appear to be the only avenue available to the military and these should be studied for greater utilization and possible increase.

3. **ISSUE TITLE**: Basic Compensation

a. Viewpoints:

It is within this area that private sector members believed that the military would undergo the greatest change. Private sector companies provide a much wider variance in pays and feel that this contributes more to overall productivity.

b. Discussion:

Civilian Panel members indicated that the basic military pay system has become too compressed. Within the private sector there is a much greater differential between supervisors and subordinates. The private sector members' experiences led them to believe that compressed pay reduced productivity. One member was surprised at the level of acceptance of the basic pay structure within the military. The overall feeling was that senior personnel may be underpaid in relation to typical industry patterns, which would require a comprehensive study of comparability to verify.

Civilian companies use a variety of techniques for establishing basic wage levels, but the predominant method described was market assessment. Firms

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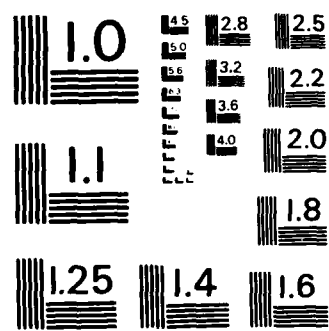
MICROCOPY RESOLUTION TEST CHART

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evaluate what is required to retain personnel by examining other (competing) companies' pays. The feeling is that private sector employees have more realistic expectations of their pay than the military and, therefore, the companies must continually reevaluate and adjust their compensation packages. Basic pay competition among the military services is non-existent unless we wish to look at foreign military systems.

c. Resolution:

Panel members were in agreement that the private sector has developed practical approaches to their salary systems. Most of the private sector Panel members expressed an interest in a restructuring of military basic pay. One area for future investigation is the development of a mechanism for future pay raises for the military which would depoliticize the process and provide military members with some stability.

4. **ISSUE TITLE**: Military Pay Comparability

a. Viewpoints:

Panel members were unanimous in their assessment that direct comparisons between military and private sector compensation are difficult due to the unique dimensions associated with the military mission.

b. Discussion:

Congress has long used "comparability" as a measure for evaluating

military pay levels. Recently, the Office of the Secretary of Defense has moved from a position of asking for comparability to one of requiring competitiveness.

One private sector Panel member suggested that the compensation package should always be looked at in its totality. There was strong feeling that trying to compare government compensation with that of the private sector would not produce meaningful data due to unique military hardships which cannot be evaluated in purely economic terms.

c. Resolution:

Panel members agreed that private sector compensation systems could not be used exclusively as the sole standard for compensation comparisons, and that the military should look at current research in the private sector to find more meaningful measures.

5. ISSUE TITLE: Pay for Performance

a. Viewpoints:

The private sector Panel members were more concerned with this topic at the outset than were the military. Currently, this managerial tool is basically unavailable to military managers and, therefore, may not have been fully examined by military leaders in the past. The military's closest parallels are its promotion and reenlistment systems.

b. Discussion:

Within the military, the principle of "pay for performance" is used much less frequently than is the case in the private sector. Obtaining comparisons among individuals in different geographic regions and settings is difficult. The reenlistment and promotion systems are generally used to weed out poor performers and, therefore, in a very indirect way address higher pay for better performers.

Private sector members described the system where basic "market rates" are first established and then good performers receive larger annual pay increases than the average employee. Some "fast track" individuals are identified early and provided additional incentives above their salary. One Panel member believed that this type of system caused discontent among fellow workers and advocated a "classless" system to maintain harmony.

One Panel member described a four-element method for assessing pay for performance. The baseline is established by the external market and internal group equity. The pay for performance is then related to both individual and unit performance, with unit performance increasing in weight as the employee becomes more senior. The government Panel members discussed the relationship of this system to military pay. The basic pay table is related to the baseline issues, while the reenlistment and promotion systems are clearly linked to individual and unit performance.

c. Resolution:

The private sector and the government approach the "pay for

performance" issue much differently. There is some feeling that the military promotion and reenlistment systems may be adequate alternatives, but performance output measures need to be evaluated. In addition, both sides need to better identify good and poor performers and provide better personnel counseling.

6.   **PANEL CONCLUSIONS**

   a.   General Views:

   1)   Industry as well as the military should move to eliminate dis-incentives.

   2)   Special and incentive pays are an effective method for fine tuning the special needs of the military services.

   3)   Changing components of a highly complex compensation system will produce uncertain results; and changes should be carefully approached.

   4)   Objectives of military and civilian pay systems are essentially the same — to hire, motivate, and retain qualified personnel.

   5)   As an ingredient of the motivational/reward system, a closer examination should be made of non-military methods for enhancing the general quality of service life including family life.

   6)   Military compensation should not be evaluated strictly by comparisons to the private sector.

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7) Non-monetary rewards are an important supplement to total compensation.

8) The government needs more flexibility in selected areas of compensation in order to establish a plan to shape the future force.

b. Proposals for Future Dialogue/Study:

1) Government and private sector planners should conduct experiments to determine the impact of compensation changes on personnel. These should be used to help shape the performance of the force at low cost and add to our data.

2) Federal/military executive compensation appears inadequate and should be reevaluated.

3) Performance output measures should be more sharply focused.

4) A closer look should be taken at flexible benefit programs for applicability in the services.

5) The government should better formulate measures of comparability.

6) The private sector and the government should begin a dialogue on non-monetary compensation.

7)   The government should examine "estate building" mechanisms as
     they exist in the private sector.

8)   Military personnel should be made fully aware of their entitle-
     ments by way of increased and more extensive communication.

PANEL 9 - RETHINKING REWARDS AND INCENTIVES

ISSUE A - PAY, PAY PROSPECTS, RECRUITING DIFFERENTIALS, AND RETENTION DIFFERENTIALS

Statement of the Issue: What are the best methods of achieving desired staffing and manpower goals in an increasingly competitive market for qualified professionals? Why are salaries, sign-on and retention bonuses becoming an area of greater concern for employers?

Background:

A. General: At the top of private sector compensation ladders -- on average -- salaries amount to 48 percent of a top executive's compensation, bonuses 17 percent, health insurance and other fringe benefits 14 percent, stock options and other long-term incentives 20 percent, and chauffeured cars and other perquisites 1 percent. Non-salary incentives and long-term compensation have been gaining in popularity as a means of attracting and retaining talented top management professionals.

    For college graduate recruits in 1984, hiring prospects were up, following a sharp downturn in 1983. Initial salary prospects were up 2.8% on average for Bachelor's Degree graduates, 2.4% for Masters, and 1.8% for Doctorates. Starting salaries ranged from $14,000 to $26,600 -- top compensation going to engineers, physicists, and computer science majors -- lower levels to education, communications, hospitality management graduates -- and mid-levels to mathematics, accounting, marketing, and financial administration majors.

    At the skilled and semi-skilled worker levels in manufacturing, retail, and service industries, hiring prospects and compensation pictures varied widely depending upon: import impacts of a strong dollar at 20-year record levels; high technology impacts upon both established and emerging industries; and the continuing transition of selected American industry sectors from a manufacturing to service emphasis.

B. Defense Perspective: In Federal service -- both military and civil -- the issue of pay comparability has long attracted wide attention. It is difficult, if not impossible, to adequately compare and quantify all the various costs and benefits of military versus Federal civilian versus private sector employment. It is generally conceded that military pay, by any measure, is significantly lower, a fact that has stimulated action on two fronts. The Department of Defense annually attempts to bring military pay for comparably trained personnel closer to par by asking Congress to raise statutory pay levels. At the same time, the military is enhancing old and exploring new ways to attract and retain talented individuals. The Selective Reenlistment Bonus

(SRB), for example, is designed to increase reenlistments in those critical skills where there are insufficient reenlistments to sustain the career force. New technology continues to create selected shortages of qualified people. Underlying all of this, the entire Federal benefits system rests in less-than-even balance by virtue of the recent disestablishment for new hires of the long-standing retirement system for Federal civilian employees (which has yet to be replaced by an alternate system for new hires) -- and the continued public controversy over military retirement entitlements. The military retirement system plays an important role in attaining the goals of force readiness and attracting/retraining quality personnel in an all-volunteer force in peacetime. Reasonable pay comparability achieved in the early 1970s has given way to a widening gap as a result of pay "caps" in 1979 and 1981. Given these conditions, military members with highly transferable skills will seek to pursue counterpart civilian careers as the economy improves and the demand increases for these skills in the private sector. Alternative retention options like pay-by-skill and other pay differential systems present substantively greater implementation problems in the military, given statutory constraints and the nature of the military institutional structure, than in the private sector.

C. Industry Perspective: Addressing the trends in job mobility and career development, businesses have been taking more time to present the best managers and recruits with well-defined pay ladders, fewer limits to internal upward mobility and individual initiative, and even recruiting bonuses. Some corporations are even offering cash awards (recruitment bounty) to any employee capable of bringing in a well-qualified new hire; these bounties can range from $250-$2,500. In a recovering economic environment, employers tend to impose fewer limitations on individual initiative and promise substantial rewards, particularly in the most lucrative industrial sectors.

Non-salary forms of compensation are receiving increased attention as the means of projecting a favorable company image or personality (corporate culture) as well as providing a good lure in the current social environment. The changing demographics of the workforce underscore the different needs of employers and employees in varying situations. The large numbers of young people who entered the labor force when the "baby boom" population reached working age, the steady decrease in young males now entering and projected to enter the labor force through the mid-1990's, the increasing influx of women, particularly women with young children, and the increasing numbers of multi-earner families all raise questions about the efficacy of benefits programs based on the traditional model of a family with a single wage earner.

Pay indexing and other cost-of-living-linked mechanisms become particularly salient during times of high inflation, as do provisions for job security in times of labor market uncertainty.

Future Concerns: An array of issues need to be considered:

- Is a system of pay differentials a useful approach in the military? What factors in such a system pose threats to military unit efficiency and readiness? Would such a system exacerbate differences between the Military Departments?

- To what extent are pay differentials effective in the long-term? Are recipients of differentials delivering in terms of performance?

- How may the "winners" in the pay and bonus competition be affecting the prospects and morale of the "losers." Is there too much emphasis on key individuals and not enough on the entire workforce? What are the equity issues?

- In what ways is the bonus reward system linked to economic factors? What will be the effects of an economic downturn on compensation commitments in the intermediate and long run?

Desired Outcomes:

- Attitudinal studies need to be performed to determine if too much is being offered. Incentives may be overcompensating those who would remain without them.

- The military in particular needs to devise an up-to-date strategy for retaining qualified career forces in the face of continuing attacks and selective inroads upon the military compensation and benefits system. Possible avenues may be non-salary compensation or enhanced status to compensate for lower pay or non-transferable skills.

- Care must be taken not to demoralize personnel not affected by aggressive recruitment and retention schemes.

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PANEL 9 - RETHINKING REWARDS AND INCENTIVES

ISSUE B - JOB VALUES AND REWARD SYSTEM

Statement of the Issue: Have job-evaluation plans which were intended to establish job values lost some of their lustre? Has the emphasis shifted to job families with supporting reward systems that pay for performance? Will managers be really free to pick and choose among a variety of rewards, punishments, and remedies to follow-up their performance ratings or will they continue to lump everyone under the protection of an average to above-average rating? What are the implications of the two- and three-tier wage programs?

Background:

A. General: In most companies, a position has been classified within a job family, and a maximum dollar value established that cannot be exceeded. These values have been arrived at through a method which establishes relationships among jobs within the organization as well as their relationship with other companies within an industry. The underlying objectives of most company compensation plans are generally:

  • To attract competent personnel
  • To retain qualified personnel
  • To provide incentives for performance
  • To provide incentives for individual development
  • To recognize long service
  • To remain competitive and maximize return by accomplishing all the above at least possible cost

The recent recession and a sudden surge of competition brought on by deregulation in some industries have brought about lower pay, generally, and the introduction of two- and possibly three-tier pay system for new hires.

B. Defense Perspective: The pay by grade and length of service system utilized by the Department of Defense for military compensation is based on the concept that the military member is a "soldier first" and "specialist second", and that military service requires a cohesiveness, esprit de corps, and sense of dutiful service and obligation. Military life places unique demands on its people and their families. This entails virtually unilateral terms of enlistment, extended tours in foreign and sometimes hostile environments, 24-hour availability, frequent moves, forfeit of individual freedoms, compliance with rigid disciplinary standards. Most significantly, the risk of life and limb is an often unpredictable and ever-present consequence of carrying out the military's prime mission: deterrence of attack, and, failing that, victory of armed conflict. Subordination of individual interests to the organization and mission is essential to building the teamwork,

esprit de corps, unit identity, and the cohesiveness necessary for success in battle. Service in the military is not predicated on formal labor contracts or work rules as with civilian employment. In the military, no individual is more important than another when all face an enemy side by side. The camaraderie that is so necessary for an effective fighting force exists, even though military people have different skills and experience levels, because they work together as a team toward a universally understood common goal. Marketplace wages (or a pay-by-skill-based compensation system) encourage measurement of worth primarily in economic terms. When the probability of loss of life is great, there is no wage high enough to provide adequate compensation, and nations depend on higher moral purposes to motivate military personnel to service.

C. Industry Perspective: Review of current literature indicates that many personnel executives are rethinking compensation planning concepts. This rethinking has been directly influenced by the recent recession, deregulation in some industries, competitiveness in general, and intense foreign competition. To address these compelling influences, job values and reward systems are undergoing change. New emphasis is being placed on:

- Pay for performance
- Two-tier and, in some cases, three-tier pay for new hires
- Pay concessions

Clearly, these shifts in emphasis create significant differences in earnings for specific jobs and job families.

Future Concerns: An array of issues need to be considered:

- What are the longer term implications of wage differentials that may vary as much as 50 percent for a specific job?

- Can pay for performance be reconciled with compensation based on position, seniority and job tenure? What are the ramifications for staff relations?

- Can pay and performance truly be linked when the consequences of an honest low rating must be firing or early retirement? Are we in danger of cycling back to the culture of the 19th century?

- What are the implications for overall productivity of the workforce in this emerging compensation environment? Have the financial and organizational costs and benefits been sufficiently proven?

- Can these compensation concepts be utilized effectively in the Department of Defense workforce? What are the specifics involved in application to different environments?

  - Military

  - Federal civilian

Desired Outcome:

- An effective methodology to best assess the two basic determinants of the success of revised reward and classification schemes: (1) whether or not the programs accomplished what was intended -- i.e., to induce performance, improve productivity, instill modified job values, etc. -- and; (2) whether or not these programs generated significantly adverse effective orientations among staff and fellow workers. Application of behavioral and social science research methods, as well as managerial evaluations of program effectiveness, can be accomplished through survey techniques. These are, perhaps, the first steps that need to be taken.

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PANEL 9 - RETHINKING REWARDS AND INCENTIVES

ISSUE C - RELATING PAY TO PERFORMANCE; PERFORMANCE-BASED PAY AND MONETARY REWARDS

Statement of the Issue: Are pay variations based on performance valid and useful motivational tools? What are the successes and failures of such systems? Are there hidden dollar and social costs?

Background:

A. General: There are two interactive parts to the pay-for-performance system -- compensation levels, and performance-appraisal programs. Basing pay upon level of performance is one goal of the system, but not its sole objective. Performance-based pay may be a means of achieving more competitive salaries and wages, a method for establishing a performance culture, defining proper horizontal and vertical relationships among jobs within the organization, or providing employees adequate opportunities for advancement. Yet another key purpose may be fiscal -- to reflect corporate financial results in the past fiscal year, and prospects for the forthcoming period expressed by the size of the fund budgeted for salary increases. Performance-appraisal processes consistent with the above philosophy usually have multiple objectives -- determining pay increases, encouraging job performance, identifying employees with promotion potential, and other performance-related stimuli. Industry experts and academics find no lack of criticism for both appraisal-systems and performance-based compensation. Often these criticisms reach through the entire corporate compensation system, suggesting that intensive interest in the task performed declines to the extent pay is directly attached to it; when pay becomes the paramount goal, the individual's interest tends to focus on it rather than upon efficient performance of the task. Merit pay plans can also pose a threat to employee self-esteem, while others argue that performance rating systems are often inconsistent, and are biased toward higher and middle ratings.

B. Defense Perspective: Although still in the experimental stage, but showing considerable promise, are Navy and Army programs for Federal civilians known as the performance-contingent reward system, and productivity gain-sharing, respectively. Underway at selected sites, the maximum sharing rate in the Navy can be as high as 50 percent (individually awarded) and has been successfully implemented in such areas as data processing (employing civilian personnel). A cost-benefit analysis at the Long Beach Naval Shipyard in California showed recovery of program set-up costs within the first three months of operation. When used in a teamwork arrangement or with quality circles, incentive pay has proven even more successful. When rewards are attached to performance, the impact on productivity and worker communication become mutually reinforced through the quality circle.

In 1983, pay-for-performance received a boost from the White House when the Administration proposed regulations for the first time tying pay increases to performance for 1.4 million Federal civilian workers. For the military, pay-for-performance goals are as far-reaching as for civilian employees, although differentials in skills and education are taken into consideration. Physicians, aviators and nuclear-qualified personnel are three occupational groups that receive differential pay, the principal purpose of which is attraction and retention or recognition of hazardous duty. Other special pay relates to hazards, additional expenses or discomforts associated with the location of duty. These, too, are founded on supply-demand theory -- finding the right level of compensation to attract enough qualified, competent personnel for these positions. While to this point performance-based incentive systems may have seen only somewhat limited application, experimentation has been increasing as private sector competing salaries in selected skills make retention more difficult. Programs such as the Aviation Career Incentive Pay (ACIP) system in the Military Departments have been instrumental in keeping skilled personnel in uniform in the face of private sector salary attractions.

C.   Industry Perspective: For those companies that have or plan to have a performance-based pay system, diverse goals are cited, ranging from reducing payroll to becoming more competitive. When used as a motivational tool, performance pay systems raise questions which are egalitarian in nature and, not surprisingly, labor unions have not generally reacted favorably to merit pay. Union leaderships suggests ratings become tools for the exercise of favoritism and related abuses. Companies responding to surveys on the effectiveness of varied performance-based compensation schemes have reported: (1) inconsistencies in the ratings between different managers, units, divisions or departments; (2) too many high ratings; (3) program guidelines are seldom uniformly followed; (4) subjective factors enter into the ratings; and, (5) confusion arises from ill-defined performance objectives. Proponents of performance-based pay assert the primacy of this philosophy, styling it as a cornerstone of US corporate compensation systems -- one recognizing individual initiative. Proponents suggest applicability to all levels, from production to executive, is consistent on a theoretical basis, merely requiring adjustments in planning and implementation. Employee perceptions and attitudes on this subject differ across job classification; but findings generally indicate that, over time, the majority of employees surveyed about their perception of a link between performance and pay increases saw little connection between demonstrable effort and subsequent pay raises.

Future Concerns: An array of issues need to be considered:

•   Can performance pay play a greater role in the military, either as a performance motivational tool or as a means of encouraging enlistees and recruits to pursue skills and work in high-demand fields?

- Will burgeoning technology and office automation promote increasing alienation of workers, diffuse needed supervision, and create declines in productivity? What role can merit pay or production bonuses play in reversing such trends and encouraging disaffected workers?

- Is it possible for merit pay in government civil service to become the vehicle for a more competitive salary system and provide a means for reducing retirement pensions and other benefits now burdening budgets?

Desired Outcomes:

- The integration of performance-based compensation systems with quality circles and worker participative management techniques could have positive effects. When increases are awarded on a team basis, peer pressure can be effectively utilized to encourage lax workers.

- Detailed studies need to be performed to determine industry-by-industry successes and failures of performance-pay incentives. Not enough analysis and too much descriptive literature may be confusing the issue. Measures of worker disaffection with such programs may not be fully quantifiable in surveys, but that may not matter much in terms of achieving higher worker performance levels.

- Are the desirable outcomes of pay-for-performance systems being effectively offset by performance measurement instruments which are faulty?

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PANEL 9 - RETHINKING REWARDS AND INCENTIVES

ISSUE D - BENEFITS, "PERKS", AND STATUS

Statement of the Issue: Is the ever-expanding array of new benefits and "perks" the last domain in which employers can remain unique and competitive in the labor marketplace? What difference do they make in employee loyalty, productivity, and personal well-being? Which are the most cost effective rewards/incentives?

Background:

A. General: The two goals at the heart of the benefits issue are retention and productivity, arrived at by various techniques and programs which will raise the self-image of the employee and serve as incentives for consistent, quality output. Which "perk" or benefit to offer often may not really be the issue, depending upon perceived value in the eyes of the benefactor, and new benefits are being regularly devised. Regional, sectional, even individual preferences may be addressed with greater accuracy through "flexible benefits" plans where employers offer a "cafeteria" of benefits for the employee to choose. From a macro perspective, are such systems equitable; are they effective enough incentives to retain and inspire employees? In the present environment with new demands being made upon the employer, the Internal Revenue Service has been examining new ways in which to tax selected benefits that for so long have been taken for granted by employee recipients. The non-taxable status of these benefits has been one of their appeals to those climbing the corporate ladder and higher income tax brackets.

B. Defense Perspective: The compensation and benefits latitudes available in the private sector are not equally available and may not be necessary or appropriate for the military services. However, while latitudes are comparably limited, some private sector lessons may be profitably applied to Federal civilian employees. The dilemma remains, though, that any substantial revamping of Federal civilian worker benefit plans, while perhaps being an incentive on one hand, may introduce a morale-killing differential. In environments where uniformed and non-uniformed personnel must work together these extras could provide fuel for divisiveness and poor staff relations. Providing equal "perks" for both, based on workplace-by-workplace availability/applicability, may be one means of improving productivity and retention.

In the private sector, company personnel are frequently offered discounts on microcomputer equipment to spur greater interest in quality work and concurrently provide a means of "socializing" people with the new machines of the office. However, in government offices such "perks" are difficult and perhaps impossible to manage given the

regulatory atmosphere in Federal service. While the incentives for implementation of such discretionary programs may be as great in the public sector as in the private sector, ability to implement those programs is severely constrained in public service. It should be recognized, of course, that military and Federal civilian personnel receive other, perhaps less subtle, benefits such as commissary and exchange privileges for military personnel, and comprehensive medical coverage, leave, and job protection rights for civilians. These items serve as a compensatory means of recognizing the special demands of Federal service.

C.   <u>Industry Perspective</u>: At upper management levels, some much-discussed "perks" are, in executives eyes, not frivolous extras at all but essential means with which to conduct highly efficient business and professional activity. Economic declines of the early 1980s triggered cost-cutting measures that targeted, among other items, these executive perquisites. Some have been subject to the budget ax, some have recently been constrained by the IRS, and others remain. The utility of a wider distribution of selected benefits, and the more subtle effects of flexible "cafeteria" benefit plans are now being assessed by designers of corporate benefit systems. Benefit systems can be a compelling reason in the current economic environment to join or remain with a firm, and employers are quick to realize this. Consequently, employee benefits are worth -- on the average -- about 20% more today than in 1973.

<u>Future Concerns</u>: An array of issues need to be considered:

- Questions of taxation may ultimately decide the extent and diversity of benefits offered.

- How can "perks" that are offered be made subject to periodic evaluation to determine their actual value to the recipient and the organization?

- The administration of an effective and equitable benefits program becomes more complex with increases in the size and complexity of the environment in which it functions. How can administrative costs be cut?

- The importance of benefits plans, "perks" and status may well become the determining factors in the baby-boom generation's quest for career development. What do benefit packages say about the offering organization in the new demographic environment?

- Is the introduction of new "perks" advisable in a military establishment? To what extent do such perks contravene traditional policy? The military now offers "dull" benefits, by private standards; what improvements, if only in image, can be made to elicit the same responses (improved retention, greater productivity) as in selected private sector systems?

Desired Outcomes:

- Effective studies should be conducted to assess existing "perk" offerings in terms of true reaction by workers. Are there divisive by-products?

- Benefits plans need to address, quite practically, some not so exciting topics such as health care; how these "basics" are to be treated in the present, competitive situation may unfortunately depend on what makes the most impact, rather than what makes the most sense.

- More work needs to be done that will link benefits and performance. Is such a causal relationship unfounded? To what extent is it a part of a larger whole?

- Government and private industry should review, compare and improve the consistency of their offerings. On the macro level, this will ensure an equitable arrangement for workers, resting on balance and equity rather than a lowest common denominator.

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PANEL 9 - RETHINKING REWARDS AND INCENTIVES

ISSUE E - HEALTH CARE AND HEALTH CARE COSTS

Statement of the Issue: When health care plans are non-contributory, as they
have generally been over the past 15 years, what opportunity do employees have
to exercise any control over the benefits? What will be the effect of proposed
taxation of such plans? Do "flexible" plans provide useful alternatives and a
means for controlling and reducing health insurance costs?

Background:

A.   General: Medical costs are the largest single service purchased by
     organizations and, since 1980, health care and health care costs have
     ranked high in surveys as a concern of human resource managers.   The
     cost of medical care has risen 15 percent in the last year, or three
     times the rate of inflation.   Employers will be moving to shape their
     health care plans for cost containment or reduction by considering
     price-leveled systems (such as those through a "preferred provider"
     arrangement, health maintenance organizations, or scheduled
     reimbursement). Non-contributory plans do not provide an incentive
     for individuals to closely check their medical billing or make the
     most prudent use of their coverage.   Rearrangement of coverage to
     contain costs has become necessary in many organizations. While
     adjustment on the part of employees has been marked with some
     confusion and disorientation, many given a choice between pre-paid
     group arrangements and health maintenance organizations (HMOs) chose
     the latter.   HMO users have noted a lessened sense of medical
     bureaucracy, while their companies benefit from lowered hospital
     utilization rates.   Similarly, the proposed taxation of health care
     programs will have significant impact on the choices made by users,
     while the Treasury Department, by its own account, expects to cut the
     deficit in half if pension and health benefits become taxable.   They
     estimate the tax revenue at $108.9 billion. What effect are these
     pressures having on the state of health care in this country?

B.   Defense Perspective: The Federal Government, as employer, provides
     health care benefits for its Federal civilian employees, for the
     members of the uniformed services, and for their respective
     dependents -- retired Federal civilian and military members, and their
     dependents, also enjoy certain health care entitlements.   Federal
     civilian employees are generally covered by commercial health care
     plans which have been approved by the Federal Government -- among
     which Federal civilian employees may select plan and level of
     coverage -- and for which they contribute a portion of the premium.

The military health care system is notably different in structure. It is, in some ways, a function of the larger purposes of the military medicine system and its facilities and capabilities. The purpose of the uniformed services medical and dental care system, as defined by the Congress, "is to create and maintain high morale in the uniformed services by providing an improved and uniform program of medical and dental care for members and certain former members of those services, and for their dependents" (see section 1071 of Chapter 55 of Title 10, United States Code Annotated). Medical and dental care for members in the active military service is provided to them at military medical facilities on an essentially non-contributory basis. Dependents of active duty members are entitled to medical care at military facilities if space is available, or at civilian hospitals if it is not, and in either case are subject to some co-payment fees. Dependents of active duty members have in past been entitled to routine dental care at military facilities only when accompanying their sponsor abroad or at certain isolated domestic stations -- but starting in June 1985, they will be afforded routine dental care at all domestic military facilities if space is available to accommodate them - routine dental care at government expense is not provided at civilian facilities. Retired military personnel and their dependents are entitled to medical care on a basis comparable to the dependents of active duty personnel, but routine dental care is generally available only to the retired member (not dependents) and then only in military facilities on a space available basis.

The fundamental purpose of the military medical system is to maintain the health readiness of the Armed Forces to execute the national defense mission in peace and war. Military manpower and military facilities are provided to cover the needs of the active forces; in-service manpower and facilities generally are not programed to fully cover the needs of dependents and retired members. Military medical manpower authorizations are based primarily upon forecast wartime needs. Military medical facilities programing also takes account of teaching and training requirements for in-service health care professionals; as well as economic and cost-benefit analyses to achieve cost-effective combinations of in-service and civilian support for the total in-patient and out-patient needs of active and retired members of the Armed Forces and their dependents.

Proposals to tax employee health care "insurance" fringe benefits would not appear applicable to active duty military members since: (1) medical and dental care is provided to them in military medical facilities, not through an insurance program; (2) physical fitness, weight control, and regular physical examination is a mandatory "condition of employment" prescribed by the government to meet national defense needs; and (3) food and quarters entitlements accrued by military personnel at the locations to which they are ordered as a mandatory part of their jobs are already tax exempt by law, perhaps creating a clear precedent on the insurance taxation issue. While the health care of dependents and retired members is, at least in part, furnished under an "insurance" program (approximately 25 percent of dependent/retiree direct health care is provided through CHAMPUS contract at civilian hospitals), retired personnel are subject to mobilization, and dependents of active duty members must accept the

conditions of employment of their sponsors. Both categories, then, share essentially the same posture in these respects as full-time active duty military personnel.

C.   Industry Perspective: Flexible health benefit plans have been a common means of reducing company medical expenses, but the idea of providing a "benefits cafeteria," which had been a central theme of behavioral scientists studying quality-of-worklife issues, has received mixed reviews. The cost of establishing and administering alternative programs can be high. In many cases, temporary help is hired for two months of the year to handle the extra work generated during the benefits-selection process. Nevertheless, savings have been realized even though flexible benefits programs are reputed to be time-consuming to implement and complicated. In multiple medical plan options, while many employees do choose the most expensive coverage, substantial numbers opt for lesser coverage. The overall savings and utility of such an approach lies in custom tailoring of benefits packages to conform to employees' varying ages, marital status, and number of dependents. These benefits alternatives also accomplish a personnel goal; employees can be given a sense of limitation on total benefits without denying specific coverage. Some people may even chose reduced coverage or accept more financial responsibility themselves to reduce the impact of medical expense inflation on the company. Reasons for adopting flexible benefits have generally been: (1) accommodating varied employee needs; (2) controlling benefits costs; (3) health insurance costs; and (4) existing or anticipated concentrations of older and younger employees. Some alternatives are currently being "pushed" by established insurance companies, emerging health services, and employers themselves. A popular idea that is consistent with a more holistic approach to human resource management is health maintenance as provided through HMOs. These pursue stress prevention in hopes of reducing sick leave and insurance costs, and even incorporate communications techniques to foster early detection and treatment by promoting awareness and education. Other programs use co-payment, where the patient pays part of the cost at the time of treatment. It is reasoned that such coverage, while usually encompassing a broader spectrum of health care (vision, dental, psychiatric), deters unnecessary visits to the clinics. Some employers have even sought to do the underwriting or the claims administration themselves. Of course, a Federally-run comprehensive National health program, non-employer administered, while not politically palatable now, remains a possible option for the future.

Future Concerns: An array of issues need to be considered:

•   What effect will the aging workforce have on the overall benefits picture? Are organizations seeing a looming burden develop, and how will this impact upon those presently entering the workforce?

- What will be the social effects of rising health care costs? Will adequate coverage be the privilege of those who work for the wealthiest employers?

- Will taxation of benefits provide a disincentive for younger employees, especially, to invest in coverage? What will be the long run costs if communities and hospitals must accommodate a potentially growing number of people who will not abe able to pay for treatment? Will people seek less treatment than required because of economic reasons?

- What are the best programs available? Should insurers pioneer the effort or is there an inherent conflict of interest? Should there be government incentives?

Desired Outcomes:

- An effort should be made by all parties -- hospitals, insurance companies, employers, and government -- to stabilize the components which are driving costs up and consuming the energies of personnel managers in trying to find answers. While a certain amount of experimentation is beneficial to discovering acceptable solutions, it may contribute to a situation that places undue risk on individuals in covering increasing medical bills.

- There is a need to reassess the social value of health care and determine what price to attach to it. Fluctuating economic conditions create hardships for budgets, but do not necessarily signal an across-the-board shrinking of benefits.

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APPENDIX 10

PANEL 10 REPORT: RETIREMENT

NATIONAL FORUM ON HUMAN RESOURCE PLANNING

FOR PRIVATE SECTOR AND DEFENSE LEADERS

PANEL 10 REPORT

RETIREMENT

INTRODUCTION

Panel 10 was chaired by Mr. Gregori Lebedev, with Major General Thomas A. Baker serving as assistant chair. Table 10-1 lists all Panel members as well as recorders and observers, together with their respective primary private or public sector affiliation.

On April 4, 1985, House Armed Services Committee Chairman Les Aspin called for a $4 billion cut in President Reagan's $18 billion proposed military retirement budget for Fiscal Year 1986. Representative Aspin's proposal, which did not stipulate how the retirement system should be changed to reduce costs by $4 billion, became both the point of departure and the focus of the Panel's discussion. While this topicality facilitated discussion, it also constrained the examination of retirement issues.

1. **ISSUE TITLE:** Objectives Versus Achievements: Civilian and Military

   a. **Viewpoints:**

   While having some similarities, the objectives and achievements of private sector versus military retirement systems are most often different.

TABLE 10-1

PANEL 10: RETIREMENT

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Those dissimilarities stem from different accountability and mission. Private sector firms are characterized by a short-term accountability to shareholders that requires flexible and responsive tools for human resource management. The effectiveness and efficiency of these management options are measured by bottom-line criteria, such as profit and growth. Juxtaposed to the private sector, the military is accountable to the public and Congress, which often retards the development of flexible and responsive alternatives. Moreover, the success of management actions cannot be assessed merely in absolute terms of the "military bottom-line" -- deterrence and war fighting capability. Instead, both must be evaluated relative to the threat. Finally, military needs must be balanced against other public policy requirements.

Private Sector: Although it has been used in specific situations for targeted portions of the workforce, retirement is not used routinely as a force management tool by private sector human resource managers. Within the work-force, retirement is not perceived as an essential part of the total compensation package. Retirement benefits are not widely advertised, and the benefits are not generally understood, except by older workers. Vesting in private sector plans usually occurs at the ten year point, sometimes with negative retention impacts. This happens, since middle managers are positioning themselves for advancement and are quite mobile. As a result, flexible options such as bonuses, profit sharing, and stock options are needed to attract and keep middle managers. Even for the bulk of the workforce, retirement is not an important retention device. Workers respond to increased seniority and the perquisites and job security that come with seniority. Finally, Panel members noted that private sector plans have had "force management" effects (albeit unplanned). Evidence suggests that the general structure of private sector plans has resulted in the trend toward earlier retirement.

Military: The military retirement system is principally a force management tool that is central to maintaining a young and vigorous active force. Combined with promotion and reenlistment screens, the system serves to remove non-competetive performers. Only 13 percent of entrants reach retirement eligibility. Military retirement benefits are advertised within the Services, perceived by members, and considered to be an essential and stable part of total compensation. The "draw" of eligibility at 20 years of service is significant in retaining members with 8 to 12 years of service and beyond.

b. Discussion:

Military and private sector retirement systems are not analogous. When members enter the military, they understand that they are embarking on a two-career work life. The member leaves the active force at a relatively young age, although former members remain available for mobilization. With rare exceptions, members will enter the civilian workforce after leaving active duty. In contrast, the private sector retiree generally does not embark on a second career, although the trend toward earlier retirement has opened opportunities for part time work and, to a lesser extent, second careers. In the private sector, retirement objectives and achievements are not actively formulated or measured as they are in the military.

c. Resolution:

Private sector and military retirement systems are not comparable in objective, design, or achievement. The evolution in the private sector of earlier retirement and the use of retirement as a force management tool may

allow the transfer of concepts and approaches from the military to the private sector. However, none have been identified to date. The military may find that the largely unplanned effects on the workforce that have resulted from the structure of private sector plans, may reenforce the notions about degradation of the force that are expected from a change to the military retirement system.

2.   **ISSUE TITLE**: Options for Change

   a.   Viewpoints:

      As expressed above, private sector retirement systems play a far different force management role than does the military retirement system. In this regard, options for change are quite naturally different and should be addressed separately.

      Private Sector: Human resource managers in private industry are becoming increasingly concerned with the change in demographics toward an older workforce. This shift brings the retirement system into focus from two perspectives: force management and workforce awareness.

      Managers in the private sector do not rely routinely on the retirement system to alter the shape of their workforce. However, with demographics highlighting a shift in the age of the workforce, use of early retirement for older workers in key managerial positions could break stagnation and enhance upward mobility. Panel members cautioned that extreme care must be taken, when developing early retirement initiatives, in order to avoid retiring the very workers targeted for advancement. Therefore, early retirement should be offered

to some, while bonuses and other incentives are used to induce others to remain. In this manner, the retirement system acts as a counterbalance to achieve the desired youth-experience mix.

The increased awareness of retirement benefits shown by older workers was also noted. Early in their careers, employees are more attuned to wages, salaries, bonuses, stock options and, in general, their quality of life. The managerial workforce with 8 to 12 years of experience is quite mobile, as individuals position themselves for advancement. For the bulk of the workforce, seniority and the rights that come with seniority are more important factors in the employee's decision to remain with one firm than is the company's retirement plan. However, the older the workforce, the more intense the focus is on the retirement system. Moreover, as concern about the solvency of the Social Security program is heightened, greater emphasis on retirement systems can be anticipated.

One challenge that is common to both the private sector and the military is the need to communicate better to the workforce just what the retirement plan contains. Panel members felt that the military (probably assisted by broad coverage of the issue in the media) currently does a better job in the communication process. On the other hand, the military member's understanding of the total compensation package is probably lower than that of private sector counterparts.

Military: Besides reenlistment bonuses, which are targeted only to selected hard-to-fill skills, the military retirement system functions as the most powerful "draw" toward a military career, when members reach the critical 8 to 12 year of service decision points. The structure of the twenty year

retirement eligibility entitlement helps to ensure a youthful and vigorous force. In addition, after leaving active military service, former members become mobilization assets who, during times of national emergency, will constitute the cadre necessary to receive and train the surge of needed recruits.

The stakes are high when dealing with fundamental changes to military retirement. The military departments and DOD have analyzed the retention behavior of military personnel in an effort to predict the impact that changes in military retirement would have on the force. These models, while imprecise, show losses that may exceed acceptable levels, thus degrading force readiness. With relatively rigid compensation elements, these losses cannot be "brought back" on a real-time basis. As a result, DOD and Service leaders have objected to changes that do not thoroughly consider force degradation. In addition, although most proposals for fundamental change in the retirement system also propose the addition of new and more flexible compensation elements to offset force degradation, Service leaders are skeptical that Congress will deliver new options. Because of this position, Service leaders have been characterized as "stonewalling" and uncooperative, which many view as hurting their credibility within the private sector.

b. Discussion:

Recently, media and Congressional interest in the military retirement system have increased. Fueled by an escalating Federal deficit, the Congress and the Administration have launched detailed reviews of Federal entitlement programs. Military retirement has not been an exception. With two cost saving

measures already introduced in the 99th Congress, Panel discussion regarding options for change dealt with the immediate challenges facing the military retirement system.

To frame the discussion on what options for change might be available, the Panel recognized that the private sector's understanding of the military retirement system was incomplete, and the members discussed key principles in order to facilitate discussion:

- To analyze properly the military retirement system, it should be treated in the context of the total compensation package. It was noted that recent efforts to compare the costs of military and private sector plans have not only been in error, but they have had the added undesirable effects of segregating retirement from other components of total compensation, and attacking the military retirement system as a single costly government entitlement program.

- Because military retirement plays an important role in determining the desired manpower and skill mix, changes to the system may result in undesired effects. To restore losses with the number and quality of members needed, it may take recruiting and training resources that exceed the initial amount saved. The Services have also discovered other underlying costs when experience levels fall due to losses of senior and mid-level managers and senior non-commissioned officers. These costs are

reflected in equipment breakage, excessive downtime, and reduced warfighting capabilities that can be linked to "growing" a new workforce from raw recruits.

The Panel concluded that these points are not articulated well to the public. Because most media coverage and rhetoric in Congress do not provide the Services' perspective, the public is unaware of the critical role played by the retirement system.

What can DOD do to overcome both the public and, to some degree, the Congressional perceptions that the military retirement system must be changed? Several interesting problems and challenges evolved from this question:

- When military and Defense Department leaders explain the critical nature of the military retirement system, the message is often not accepted. The Joint Chiefs of Staff are seen as "union leaders" protecting the retirement benefits of their constituency.

- When explaining the system to the Congress, another factor enters. Fewer members of Congress than in previous years have served in the military. As a result, their identity with Service life is limited.

- The Panel agreed that military retirement could best be reviewed and articulated by an unbiased third party. They went on to explain that this did not mean another "blue ribbon" commission.

- Some Panel members thought that DOD should take a serious look at what Congress and the public found most objectionable about military retirement. They questioned, "Why hasn't DOD been more proactive in suggesting fundamental change that might mitigate some of the Congressional and public concerns?".

Critics within Congress and private sector analysts have some common threads in their arguments to change the military retirement system. The Panel reviewed a number of these:

- Some critics disagree with the experience distribution of the workforce desired by DOD. Much disagreement is centered on what is viewed as a system that encourages experienced officers and senior non-commissioned officers to leave active service at 40 to 45 years of age. The military would counter with arguments for a youthful force and with the fact that members leaving with 20 years of service form a valuable mobilization pool and that their experience is not totally lost.

- Some critics would argue that predicted losses are overstated and that, if losses do exceed a critical threshold, they can be "bought back" with new, flexible elements of compensation. DOD is quick to point out that efforts to restore lost experience might be more costly than the short-term savings from changes in the retirement system. Moreover, costs will be increased, because restoring losses will coincide with the shrinking youth population and the increased competition with private sector employers that will result through the mid-1990s. The Panel

members reiterated that the current compensation system does not allow the flexibility necessary to react quickly to workforce degradations. They went on to question whether the large bonuses that would be needed to keep quality people would ever be politically acceptable to Congress or the public.

- Critics often claim that the Services now pay comparable wages to the private sector. They no longer see the need for the deferred compensation that the current retirement system includes. The military would counter by indicating that military life is characterized by risky, rigorous, and arduous duty, often for long hours without extra compensation. These conditions are not compensated without the deferred compensation of military retirement.

Finally, the Panel summarized the reasons for not offering a "proactive" package of retirement changes: (1) changes to military retirement will degrade the force and, thus, degrade readiness; (2) short-term savings can be expected to be offset by higher recruiting, training, and reenlistment costs; (3) flexible and responsive compensation elements that would be needed are not likely to be approved by Congress; (4) increased recruiting requirements that would result will coincide with the shrinking youth population and increased competition with the private sector; (5) many interactions must be examined in more detail; for example, ten-year vesting for active service may have an adverse impact when combined with the Reserve retirement system.

c.   Resolution:

The Panel concluded that efforts to educate the public on the military view of the retirement system would probably not succeed. Generally, unless the issue is raised by the media as a major national public policy issue, the public will remain disinterested. However, attempts to educate Congress could be bolstered by an unbiased third party. Efforts by the military leadership, who are viewed as simply "keeping faith" with their workforce, will most likely fail. Finally, both private sector and government leaders can learn from one another. As retirement is used more in the private sector for force management, private sector human resource managers will be able to build on the experience of the military. Defense leaders need to look more closely at the largely unplanned reaction of the national workforce to the structure of existing private sector plans. For example, the Bureau of Economic Research has an ongoing effort to perform a wide variety of simulations that are based on information from 2,400 private sector retirement plans.

3.   **ISSUE TITLE:** Cross-Sector Hiring of Retirees

a.   Viewpoints:

This issue was framed with the following basic question: Does the public perception of an overly generous military retirement system result in a bias in post-retirement pay? The consensus of the Panel was no. They considered the fact that former military members begin a second career at compensation levels below comparably aged and educated civilian counterparts to be a function of the transferability of skills and the lack of understanding of

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skills by military members or private sector employers. The Panel went on to broaden the discussion to examine the potential for increased lateral entry into the military.

b. Discussion:

The issue of relating military with private sector skills was a key point in the discussion. First, many skills are simply not transferable. Moreover, only limited mechanisms exist for matching military and private sector skills. Second, many military members do not understand what their skills are. Educating members in this area would help individuals in establishing reasonable expectations and in bargaining with future employers. The Panel examined in more detail a Marine Corps program that helps members approaching the twenty year point in their career.

The fledgling Marine Corps program, which has been initiated at three bases and currently focuses on senior officers, is designed for those in their nineteenth year of service. The military member pays for the three-part program, which is partially covered by the G.I. Bill. First, both the member and spouse are interviewed and given tests to determine interest and skills. Second, they are trained in the basics of job search, for example the interview process. Finally, a network search for job possibilities is conducted. It should be noted that some Panel members expressed concern that the program would encourage many who are not contemplating or committed to retirement to leave the Services. However, to date, the evidence does not suggest that this is a problem.

As the Panel examined the potential for lateral entry, a common belief evolved that, despite much rhetoric, a greater degree of lateral entry into the military is probably an overblown proposition. Given current enlistment and pay mechanisms, lateral entry programs have been generally unsuccessful. Even reentry of those with prior military service is subject to the uncertainty of economic cycles. A number of limiting factors were identified: (1) unless the military is willing to pay a substantial amount, it is likely to get those who have had problems in the private sector; (2) since one important value of the military to individuals is training, pretrained individuals find the military relatively less attractive; (3) since unemployment of older workers is highly correlated with unemployment of youth, lateral entrants are easiest to get when they are least needed; and finally, (4) because industry simply has not committed to training high technology to the extent that the military has, needed military skills are limited in the private sector.

   c.   Resolution:

The Panel concluded that initiatives in this area will have to come from the military. At a minimum, improved mechanisms for comparing military and private sector skills should be explored.

4.   **PANEL CONCLUSIONS:**

Both within the private sector and the military, retirement is a complex subject that must be viewed as part of the total compensation package; that must consider not only employers' requirements, but also employees' needs; and that cannot ignore the impacts of legislative influence and social demands. As a result, the Panel recommends for future forums or further dialogue: (1) that

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the retirement issue be combined, in a broader discussion of the total compensation package, with the elements that were talked about in Panel 9, Rethinking Rewards and Incentives; and (2) that the private sector be represented by a cross-section of more industries, including paramilitary organizations.

PANEL 10 - RETIREMENT

ISSUE A - OBJECTIVES VS. ACHIEVEMENTS: CIVILIAN AND MILITARY

Statement of the Issue: Has the military retirement system achieved its primary purpose as a key tool in maintaining national military readiness? Have retirement pay levels in the private and Federal civilian sectors achieved or exceeded the prime goal of providing retirement income sufficient to reasonably maintain the employee's standard of living? How does military retirement compare in this regard?

Background:

A.   General: "As the nation's population matures, increased strain is being placed upon our already over-burdened retirement income systems." Having made that statement in 1981, the President's Commission on Pension Policy listed the following problems with the nation's retirement income programs and policies:

   • lack of pension coverage for many;

   • increasing dependency on pay-as-you-go programs;

   • low benefits for some who are covered;

   • excessive benefits for others;

   • lack of coordination among programs;

   • gaps in protection for women;

   • inadequate incentives for retirement savings;

   • inconsistent tax policies;

   • erosion of benefits due to inflation;

   • abuses in disability programs; and

   • employment problems of older workers.

   The President's Commission firmly recorded its view that a prime purpose of retirement systems is to insure that today's retirees and tomorrow's elderly are able to maintain a reasonable standard of living. For many, that is not now the case -- as indicated by the retirement system problems listed above. Such problems are never easily resolved, though some of those listed above in 1981 by the President's Commission have since been addressed; for example, gaps in protection for women are addressed by the Retirement Equity Act

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(REACT), and then-inadequate incentives for retirement savings have been modified by current Individual Retirement Account (IRA) statutes. Their total resolution is made more difficult as our population matures and an unprecedented shifting of older workers into retirement takes place. Both the government and the nation's private sector employers face similar cost and human resource challenges in the retirement arena, since they share the same aging national population pool.

B. Defense Perspective: Unlike private sector retirement systems, the primary objectives of the military retirement system are not so much to devise an equitable benefits system, although that is certainly a major consideration, but to satisfy three overriding national objectives: (1) serve as an effective force readiness and management tool; (2) provide a mobilization base for national emergencies; and (3) provide strong institutional support for a military career. Military members must serve a minimum of 20 years in order to request non-disability retirement under the discretionary authority vested by law in the Secretaries of the several Military Departments; they have no vested right to any nondisability retirement benefit prior to the completion of 30 years of service in the case of enlisted members, and 40 years of service in the case of officers. In practice, service members electing to exercise their option of requesting voluntary retirement at the 20 year service point normally are so retired by their respective Secretaries; and they are, in any case, mandatorily retired at specific age and service points which are prescribed in law for officers, and in regulations effectively having the force of law for enlisted members. The fundamental purpose of these rules is to assure an able-bodied, vigorous, national military capability fully able to meet the rigorous demands of national defense. In these respects, the nation's military retirement system has purposes similar to those of retirement systems for other categories of individuals whose work environments are also uniquely rigorous (i.e., policemen, firemen, air controllers, selected private sector employees serving in physically and mentally demanding skills/environments). Military retirement benefits are not out of line with some of the better police, fire, and similarly demanding or high-risk employee retirement systems. After retirement, officer and enlisted retirees who enter second careers typically do so at pay levels below those of similarly aged and educated civilian counterparts. Concurrently, as retired military members, they remain subject to mobilization in war or national emergency, helping to satisfy the national defense requirement for a pool of trained and qualified persons available for immediate recall.

C. Industry Perspective: Social Security benefits, personal savings, and company pension entitlements are the three elements private sector businesses generally consider in targeting desired income levels for their retirees. Notably, many if not most mid-size and larger private sector firms incentivize employee personal savings plans through guaranteed interest rates and/or matching contributions, and these incentivized savings plans can be a major element of post-retirement income. Private sector pensions have become a more important part of total compensation in the last 10 years as a result of: (1) legislation establishing federal guidelines (Employee Retirement Income

to age 70; (2) tax law changes that resulted in tax exempt deferred income programs such as Keogh, IRA and 401 (k) plans. In some ways, private sector plans are like military retirement in that they are noncontributory (81%) and use an average income or annuity base (20% use "Hi-3"; remainder use "Hi-5"; military entrants since 8 Sep 80 are under "Hi-3"). In other ways, private sector plans are unlike military retirement in that they: typically are 100% vested after 10 years service; are frequently integrated with social security benefits; do not index benefits to changes in the CPI; and typically provide full, unreduced benefits only at age 60 (though a significant number allow retirement with reduced benefits for 30 years of service at age 55).

Private sector retirement system goals are significantly different than those for the military system in that private sector plans are focused primarily upon post-retirement income maintenance and are relatively infrequently used (in combination with special company concessions) for personnel management purposes such as relieving promotion stagnation or downsizing the older worker component of the company workforce. Representatives of The Conference Board informally report, however, that in the recent past a relatively large number of private sector plans apparently used early retirement schemes for just this purpose -- though it is not clear whether that use was a pre-designed, planned action, or simply a reaction to a combination of management and economic circumstances.

Future Concerns: An array of issues need to be considered:

- Would an All-Volunteer military force heavily dependent upon perceived military retirement entitlements as a career force retention incentive, be able to maintain force size, quality, and readiness if the current military retirement system were further substantively downgraded?

- Will economic incentives and changing trends in the private sector workplace prove too great a competitive edge in private sector vs, military competition for their respective shares of the shrinking youth population of the United States? Will downgrading of military retirement benefits markedly exacerbate such a trend?

- How will private sector retirement systems be modified -- if at all -- to accommodate a rapidly aging population, with growing numbers of persons in retirement and fewer in the workplace?

- Military service requires an extraordinary commitment. What level of "deferred compensation" (in the form of retirement entitlements) will be necessary to adequately compensate future military members for the human costs involved -- separation from mainstream society; long hours; no overtime; periodic relocations; forced family separations; frequent exposure to risk and possibility of injury or death; rigorous codes of conduct; inability to determine work/living conditions; limited personal and political freedoms.

- What elements of private sector pension systems and planning can the military consider as a means of reducing future retirement costs without adversely affecting the system's important contribution to attainment of defense readiness objectives?

- Are the stated goals of private sector and military retirement systems adequately understood, articulated, and expressed?

Desired Outcomes:

- Detailed comparison of industry vs military retirement systems — and, specifically, comparison of specialized "paramilitary" type benefit elements built into the overall retirement systems of major employers (for example, the special early retirement benefit level entitlements of mariners, aviators, and foreign service personnel employed by organizations such as Gulf Oil Corporation).

- Assessment of utility and feasibility of military and private sector retirement systems adopting salutary elements of each other's pension constructs to their own use.

- Identify trends evident in retirement system changes.

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PANEL 10 - RETIREMENT

ISSUE B - OPTIONS FOR CHANGE

Statement of the Issue: How relevant are the prevailing retirement and pension
policy assumptions and formulas in today's world? What changes could be made in
the public and private sectors in recognition of such diverse trends as in-
creased job mobility and the popularity of individual, tax-deferred savings
plans?

Background:

A.   General: Despite improvements such as the new Retirement Equity Act
     amendments to the Employee Retirement Income Security Act (ERISA), the
     three-tiered retirement income scheme consisting of social security,
     personal savings, and private pensions is still in need of modifica-
     tion. Job mobility is no longer a sign of irresponsibility or lack of
     commitment, yet there are relatively few portable pension plans that
     recognize this. Partial retirement is gaining acceptance as longevity
     and the willingness to sustain meaningful work increases. Similarly,
     Individual Retirement Accounts (IRAs), employer-sponsored pre-
     retirement financial and psychological counseling are producing better
     prepared retirees. This is a vanguard approach and neither public nor
     private sector systems as a whole have made the necessary planning
     transition.

B.   Defense Perspective: The military retirement system is particularly
     sensitive to changes. Downgrading of entitlements could have a
     substantial and immediate adverse effect upon retention. For example,
     current military retirement benefits tend to be seen as reasonably
     compensating those enlisted and officer personnel (on a deferred
     compensation basis) who have acquired skills that are not readily
     transferable to civilian workforce situations. In an environment of
     derogation of military pensions, with concurrent advances in private
     sector retirement and supporting savings and/or profit-sharing plans
     for employees, the retirement element of military compensation
     life-stream earnings can critically impact continuation rates in the
     career segment of the force. Some reductions have been implemented
     (i.e., high-three basic pay multipliers, selective indexing "caps",
     and annual rather than semi-annual cost-of-living adjustments to
     retired pay). Others are proposed. Further derogation of military
     retirement entitlements will directly affect the quality of personnel
     the Armed Forces can attract and retain. In an All-Volunteer Force,
     no-Draft environment, the impact can be particularly adverse.

C.   Industry Perspective: Some US companies are attempting to alter the
     traditional retirement system concept by keeping some older workers on
     the job through such inducements as job sharing, reduced hours, and
     attractive job changes. These moves are, in part, a response to

changing demographics -- an older American workforce and projected younger worker shortages -- and concurrently respond to changing popular attitudes about retirement. Retirement benefit levels in the private sector, combined with individual needs for financial security and job satisfaction, have led some employers into other nontraditional approaches, including: sabbaticals; phased retirement; financial counseling; part-time work; self-employment; and extended leaves to allow the employee time to plan and establish retirement incomes and lifestyles. This diversity of retirement alternative options may prove to be more viable economically and socially than traditional fixed plans. Of the organizations reporting on one survey, 15 to 20 percent provide various forms of "gradual retirement" to help with a smooth transition from fully-active to fully-retired status.

Future Concerns: An array of issues need to be considered:

- Anticipated retirement income is consistently viewed from an employee vantage point which normally bases expectations of future income on the last 10 years of personal experience. In times of economic uncertainty, it is not clear that larger numbers of retirees will be able to subsist above the poverty level. Conversely, some studies indicate income from pensions and social security increased dramatically in the last decade, the elderly often have a very low index of inflation vulnerability, and retirees tend to have higher pre-tax incomes than the average for the total population.

- Does the demographic factor really make a difference in the workplace? Encouraging older workers to stay longer may mean paying too much for increasingly obsolete skills, instead of training younger persons with longer workforce staying power and a potentially greater adaptability to change. The converse may also be true -- many older workers have skills greatly in demand, but no longer popular in training/education courses (e.g., tool and die).

- Will the real or perceived instability of social security benefits alter individual and company retirement planning strategies?

- How does increased job mobility affect benefits. Should legislation similar to the Kennedy-Ferraro bill be enacted to ensure vesting, integration and portability of benefits? Without a mechanism to ensure that accrued pension rights are carried with workers, many may wind up with a series of insignificant benefits from a variety of plans.

- What alternative strategies can Defense provide for its military and civilian workforce to ensure adequate post-retirement incomes independent of traditional pensions? What are their legal feasibility? Can strategies such as incentivized savings plans find application in the military?

Desired Outcomes:

- A research agenda should be established to develop retention models and perform retirement studies (attitudinal and analytical) to evaluate improved retirement benefit systems. The agenda should address the potential to infer the behavioral response to a change in the retirement system in one sector based on research conducted in the other sector. Addressing the needs of the workforce can provide new avenues for cost savings through innovative programs.

- In both government and industry, an analysis of the variables that comprise retirement income formulas should be performed so that retirement income forecasts are accurately projected. Analyses should take full account of social security and individual savings.

- Industry is in a position to pioneer in the management of retirement plans as a means of reducing cost burdens. Government systems are more tightly controlled by statute, and management innovation is not as feasible. Innovation by industry already provides some potential models for government use (i.e., incentivized supplementary savings plans).

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PANEL 10 - RETIREMENT

ISSUE C - CROSS-SECTOR HIRING OF RETIREES

Statement of the Issue: Hiring of retirees is encouraged by an aging popula-
tion, steady reduction of our youth population (projected through 1996),
selected area and occupation labor shortages, and changing attitudes toward
older workers. Inflation impacts on retirement benefits, as well as the human
desire for work "satisfaction", motivates many retirees to return to the
workplace. What new cross-sector hiring strategies are best employed in this
new environment, and what are the problems associated with hiring the retiree?

Background:

A. General: In 1981, the President's Commission on Pension Policy
reported that: "Taken together, the nation's retirement income
systems now deliver benefits to about 23 million older Americans." In
part, the number receiving retirement benefits has been influenced by
the marked trend toward early retirement (before age 65) in the last
two decades. In 1978, 61 percent of all Social Security retired
worker beneficiaries (54 percent of men and 68 percent of women)
retired before age 65. In the same year, age 61 was the average age
of retirement in the Federal Civil Service. For uniformed service
workers like police and firemen, average retirement age is much
younger (48 for policemen in Los Angeles in 1977, and 49 in New York
state). United States enlisted military personnel average retirement
age is about 43. Most corporate pension plans pay reduced early
retirement benefits as early as age 55. Actuarially reduced Social
Security benefits have been payable at age 62 since 1956; and
widow(er)s benefits are available at age 60.

Many persons receiving retirement benefits return to the active
workforce for a variety of reasons, including: erosion of pensions
due to inflation forces a return; disillusion with "idle" retirement,
and need for satisfying work; changing attitudes toward work for older
persons -- such as the elimination of "mandatory" retirement ages
(except in rigorous and demanding professions -- police, fire,
military, etc.); and growing demand for skilled older workers in
selected labor shortage skills and in the face of a steadily declining
US youth population (projected to continue through 1996).

In sum, there are large numbers of "retired" older workers available
and motivated to return to the workforce, many without regard to the
occupational sector in which they were previously employed - and
social/economic/demographic factors combine to provide a demand for
their services. Studies suggest large numbers of technicians and
managers will retire in coming years, leaving firms to face a
potential skill and management shortfall problem. Solid succession
planning may be needed to overcome the shortages of well-entrenched

talent, but not all experts agree on the extent of the predicted shortage or the validity of its assumptions. Those are: (1) retirement age won't change; (2) retirement planning and pension policies will follow traditional patterns; and (3) retirees will behave as in the past two decades regardless of economic conditions. Retiring technicians and managers represent an experience base that could be difficult to replace if those behavioral assumptions are correct.

There are several problems associated with cross-sector hiring. Retirees, depending on their status, may command quite high salaries, though it is also true that retirees generally "require" less pay in retirement years. Deteriorating or outdated skills may limit the utility of retirees in vigorous, innovative service and high-technology industries. Finally, post-retirement employment can be selectively discouraged by the resultant loss of retirement benefits -- caused either by Social Security offsets for employed persons, "dual compensation" limitations in Federal and other public retirement systems, or comparable factors.

B. <u>Defense Perspective</u>: Dual compensation laws limit the entitlements of military retirees employed in Federal Civil Service. Regular officer retirees may keep about $7,000 plus one-half the remainder of their military retired pay. Reserve officer and enlisted retirees were not similarly constrained up to 10 January 1979. All military retirees employed in Federal Civil Service after 10 January 1979, have their combined military retirement and civil service pay limited by a statutory pay "cap" of $68,700.

Military officer and enlisted retirees who elect post-retirement employment in the private sector enter their second careers at pay levels below those of similarly aged and educated civilian counterparts. The Conference Board reports officers $9,000 (-27%) and enlisted $8,100 (-20%) below the 50th percentile (median) of civilian counterparts. The earnings gap narrows over time but never closes; lifetime differential is $59,000 (-13.7%) for officers, $80,000 (19.7%) for enlisted.

Compounding these impacts on the military retiree, their spouses' careers are hurt by the frequent moves required in military service, and it is impossible for them to build tenure. In the short-term, working spouses are unemployed 5 months per year, and lose $4,000 in pay between jobs. In the long-term, Bureau of Labor statistics data show military wives have higher unemployment rates (17% military vs 5.4% civilian in 1984) and 30% lower incomes ($4,700 yearly for military vs $6,800 yearly for civilian in 1983).

C. <u>Industry Perspective</u>: Succession planning in industry uses cross-sector hiring of retirees, across both government and private spheres and laterally between industries and Services, as a way to deal with labor and skill shortages being experienced. These post-retirement employment opportunities are also being expanded as attitudes and policies toward older workers and retirement change. Some companies are attempting to change "traditional" retirement attitudes by keeping older workers on the job through such inducements as job sharing, reduced hours, and attractive job changes. Other companies are

offering partial retirement or sabbaticals allowing prospective retirees to plan their futures financially, as well as professionally. On balance, growing numbers of older workers are choosing part-time work and career changes (as well as self-employment) instead of "full" retirement.

One recent study emphasizes the impending large-scale wholesale loss of aging industry management personnel during the last five years of the decade of the 1980's. While there is no real agreement on magnitude, major firms such as Standard Oil, General Electric, Monsanto, and others are now focusing on succession planning. Cross-sector hiring of experienced workers and retirees offers some solu-tions to the impending shortage of technical and management talent. These are some of the factors which planners are considering:

- The workforce will grow by only 1.2% per year from 1985 to 1990, and only 0.8% a year in the 1990's.

- The coming generation of managers tends to be more dedicated to personal careers -- while World War II-vintage managers tended to place company loyalty first.

Future Concerns: An array of issues need to be considered:

- If the coming generation of managers is more dedicated to personal career pursuits, and if company loyalty takes a backseat, can/should this characteristic be offset by retraining older workers, cross-sector hiring of retirees, and related techniques?

- Will retirees be willing to take positions in government and industrial sectors other than those in which they've spent a career? Will they be effective if they do?

- What other factors (hours, status, prestige) can be manipulated to make cross-sector hiring more attractive?

- Are military retirees a partial answer to projected near-term losses of aging managers in the private sector?

Desired Outcomes:

- The pool of talent available in retirement is substantial; how can it be fully used? One such use may be in training systems. While older workers may not have a mastery of the latest technology, they may be able to offer unique training insights based upon career experience.

- How can gradual or phased retirement best be exploited in the national interest as the growth in the labor force slows over time?

- Can productivity and management enhancements flow from smoother transitions from full employment to full retirement?

- How can effective cross-sector hiring policies best exploit the selection of experienced personnel who are available in the current retired population of almost 25 million persons?

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